DoD 5136.1-P

Medical Readiness Strategic Plan (MRSP) 1998 - 2004

August 1998

ASSISTANT SECRETARY OF DEFENSE
FOR
HEALTH AFFAIRS

THE ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301-1200

HEALTH AFFAIRS

FOREWORD

This Plan is issued under the authority of DoD Directive 5136.1, "Assistant Secretary of Defense for Health Affairs (ASD(HA))," May 27, 1994. It prescribes procedures on actions that must be accomplished to resolve medical readiness problems spanning FYs 1998 through 2004.

This Plan applies to the Office of the Secretary of Defense (OSD), the Military Departments, the Chairman of the Joint Chiefs of Staff, the Commanders of the Combatant Commands, the Defense Agencies, and the DoD Field Activities (hereafter referred to collectively as "the DoD Components").

This Plan is effective immediately and is mandatory for use by all the DoD Components. The Heads of the DoD Components that are listed as the "Primary Action Offices (PAOs)" in Appendix 2 shall submit and maintain implementation plans using the format specified in Appendix 3. New implementation plans are due to the OASD(HA) within 90 days of publication of this Plan. Implementation plans shall be updated quarterly. PAOs shall provide the OASD(HA) with the name of an action officer who will serve as the point of contact for implementation plan maintenance in conjunction with implementation plan submission.

Send recommended changes to the Plan and implementation plans to:

Assistant Secretary of Defense for
Health Affairs, 3E346
Office of the Assistant Secretary of Defense for Health Affairs
1200 Pentagon
Washington, DC 20301-1200

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Dr. Sue Bailey
Assistant Secretary of Defense for Health Affairs

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(b) Medical Readiness Strategic Plan 2001, March 1995[2]
(c) Joint Vision 2010, July 1996[3]
(d) Defense Planning Guidance (DPG), FY 2000-2005, April 1998[4]
(e) DoD Instruction 1322.24, "Military Medical Readiness Skills Training," December 20, 1995
(f) Joint Pub 4-02, "Doctrine for Health Service Support in Joint Operations," April 1995[5]
(g) Section 161 et seq of title 10, United States Code
(h) Memorandum of Understanding between the Assistant Secretary of Defense for Health Affairs, the Deputy Director for Medical Readiness (Director for Logistics J4, DDMR(J4)), the Army, the Navy, the Air Force, the Marine Corps, and the Commander, Human Systems Center, October 13, 1996[6]
(i) CHCS II Mission Needs Statement (MNS), November 14, 1996[7]
(j) CHCS II MAISRC Milestone 0 approval, January 20, 1997[8]
(k) CHCS II Operational Requirements Document (ORD), April 10, 1997[9]
(l) CHCS II Test and Evaluation Master Plan (TEMP), May 30, 1997[10]
(m) Joint Pub 4-02.1, "Health Services Support Logistics in Joint Operations," September 1997[11]
(n) Joint Pub 4-02.2, "Joint Tactics, Techniques, and Procedures for Patient Evacuation in Joint Operations," December 1996[12]
(o) Chairman of the Joint Chiefs of Staff Memorandum, "Military Training Structure Review," November 20, 1992[13]
(p) DoD Directive 6000.12, "Health Services Operations and Readiness," April 29, 1996
(q) "Military Blood Program 2004," May 1985[14]
(r) Joint Pub 3-07, "Joint Doctrine for Military Operations Other Than War," June 1995[15]
(s) Section 1522 of title 50, United States Code
(t) International Atomic Energy Agency inspection team reports, April 1992[16]
(u) "Report on Medical Readiness Planning in the U.S. European Command," April 1984[17]
(v) Joint Pub 3-11, "Joint Doctrine for Nuclear, Biological, and Chemical Defense," July 1995[18]
(w) DoD Directive 6205.3, "DoD Immunization Program for Biological Warfare

Defense," November 26, 1993

(x) Army Qualitative Research Requirements for Nuclear Weapons Effects Information, FY 1995 and 1996 Edition[19]

(y) General Accounting Office Report, "CHEMICAL AND BIOLOGICAL DEFENSE - Emphasis Remains Insufficient to Resolve Continuing Problems," GAO/NSIAD-96-103, March 1996[20]

(z) General Accounting Office Report, "OPERATION DESERT STORM-Army Not Adequately Prepared to Deal with Depleted Uranium Contamination," GAO/NSAID-93-90, January 1993[21]

(aa) "GROUNDFIRE 95 Low-level Radiation Issues Workshop," March 1996[22]

(ab) Section 1701 et seq of title 10, United States Code

[1]Available from the ASD(HA), 5111 Leesburg Pike Suite 810, Falls Church, VA, 22041-3206

[2]Available from the ASD(HA), 5111 Leesburg Pike Suite 810, Falls Church, VA, 22041-3206

[3]Available from the Joint Staff via the internet at http://www.dtic.mil/doctrine/index.html

[4]Classified document with limited distribution. SecDef control number X00496-98

[5]Available from the Joint Staff via the internet at http://www.dtic.mil/doctrine/jel/new_pubs/jp4_02.pdf

[6]Available from the TMIP Functional Program Office, (703) 681-3927

[7]Available from the Clinical Business Area via the internet at http://cba.ha.osd.mil/library

[8]Available from the Clinical Business Area via the internet at http://cba.ha.osd.mil/library

[9]Available from the Clinical Business Area via the internet at http://cba.ha.osd.mil/library

[10]Available from the Clinical Business Area via the internet at http://cba.ha.osd.mil/library

[11]Available from the Joint Staff via the internet at http://www.dtic.mil/doctrine/jel/new_pubs/4_02_1.pdf

[12]Available from the Joint Staff via the internet at http://www.dtic.mil/doctrine/jel/new_pubs/jp4_02_2.pdf

[13]Available from the ASD(HA)(HOP), (703) 681-1711

[14]Available from the Armed Services Blood Program Office, (703) 681-8010

[15]Available from the Joint Staff via the internet at http://www.dtic.mil/doctrine/index.html

[16]Available from the International Atomic Energy Agency, P.O. Box 100, Wagramerstrasse 5, A-1400 Vienna, Austria

[17]Available from the ASD(HA)(HOP), (703) 681-1711

[18]Available from the Joint Staff via the internet at http://www.dtic.mil/doctrine/index.html

[19]Available from the Armed Forces Radiobiological Research Institute (AFRRI), (301) 295-1210

[20]Available from the GAO via the internet at http://www.gao.gov/

[21]Available from the GAO via the internet at http://www.gao.gov/

[22]Available from AFRRI, (301) 295-1210

DL1. DEFINITIONS

DL1.1. TERMS

Terms used in this Plan are defined, as follows:

DL1.1.1. Combined Forces. Multi-national forces (e.g., United States and Germany)

DL1.1.2. Communications. Communications is defined as the exchange of voice, text, data, video, and global positioning information; internal, short, intermediate, long-haul, synchronous and asynchronous (i.e., store and forward).

DL1.1.3. Force Health Protection. A unified and comprehensive strategy that aggressively promotes a healthy and fit force and provides full protection from all potential health hazards throughout the deployment process. Its major ingredients include healthy and fit force promotion, casualty and injury prevention, and casualty care and management.

DL1.1.4. Glucose-6-Phosphate Dehydrogenase (G6PD). G6PD is a blood enzyme. Individuals that have a G6PD deficiency may develop an anemia from drugs used to treat malaria.

DL1.1.5. Integrated Forces. Multi-Component Forces of one nation (e.g., U.S. Active Duty, Reserve, and Guard)

DL1.1.6. Integrated Medical Logistics Group (IMLG). IMLG is a logistics working group that was chartered by the Service SGs. The IMLG's mission is to address and resolve various medical logistics problems that effect all three Services; therefore, the IMLG represents the three Services

DL1.1.7. Joint Forces. Multi-Service Forces of one nation (e.g., the U.S. Army and the U.S. Navy)

DL1.1.8. Sourcing. The process of "sourcing" is the act of identifying the actual units to be used by the Combatant Commands for planning and actual contingencies.

DL1.1.9. Surveillance. System for collection, analysis, and dissemination of disease prevalence and incidence information.

DL1.1.10. Year 2000 (Y2K) Compliance Year 2000 compliant, as used in this

Plan, means, with respect to information technology, that the information technology accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to the extent that other information technology, used in combination with the information technology being acquired, properly exchanges date/time data with it.

AL1. ABBREVIATIONS AND/OR ACRONYMS

AL1.1. ABBREVIATIONS AND/OR ACRONYMS WITH MEANINGS

Abbreviations and/or acronyms used in this Plan have the following meanings:

AL1.1.1. AC. Active Component.

AL1.1.2. AE. Aeromedical Evacuation.

AL1.1.3. AFEB. Armed Force Epidemiology Board.

AL1.1.4. AFMIC. Armed Forces Medical Intelligence Center.

AL1.1.5. AFMRDA. Armed Forces Medical Research and Development Agency.

AL1.1.6. AFRRI. Armed Forces Radiobiological Research Institute.

AL1.1.7. AMC. Air Mobility Command.

AL1.1.8. ASBP. Armed Services Blood Program.

AL1.1.9. ASBPO. Armed Services Blood Program Office.

AL1.1.10. ASBREM. Armed Services Biomedical Research Evaluation and Management.

AL1.1.11. ASD(C^3I). The Assistant Secretary of Defense for Command, Control, Communications, and Intelligence.

AL1.1.12. ASD(HA). The Assistant Secretary of Defense for Health Affairs.

AL1.1.13. ASD(NCB). The Assistant Secretary of Defense for Nuclear, Chemical, and Biological.

AL1.1.14. ATH. Air Transportable Hospital.

AL1.1.15. BD. Biological Defense.

AL1.1.16. BDC. Blood Donor Center.

AL1.1.17. BPD. Blood Product Depots.

AL1.1.18. BSC. Biomedical Sciences Corps.

AL1.1.19. BW. Biological Warfare.

AL1.1.20. BWD. Biological Warfare Defense.

AL1.1.21. CB. Chemical and Biological.

AL1.1.22. C^2. Command and Control.

AL1.1.23. C^3I. Command, Control, Communications, and Intelligence.

AL1.1.24. C^4I. Command, Control, Communications, Computers, and Intelligence.

AL1.1.25. C^4IFTW. Command, Control, Communications, Computers, and Intelligence for the Warrior.

AL1.1.26. C^4IM. Command, Control, Communications, Computers, and Information Management.

AL1.1.27. C^4ISR. Command, Control, Communications, and Computer Intelligence Surveillance and Reconnaissance.

AL1.1.28. CCQAS. Centralized Credentialing and Quality Assurance System.

AL1.1.29. CD. Chemical Defense.

AL1.1.30. CEIS. Clinical Executive Information System.

AL1.1.31. cGMPs. Current Good Manufacturing Practices.

AL1.1.32. CHAMPUS. Civilian Health and Medical Program for the Uniformed Services.

AL1.1.33. CHCS. Composite Health Care System.

AL1.1.34. CM. Countermeasures.

AL1.1.35. COE. Common Operating Environment.

AL1.1.36. COEA. Cost and Operational Effectiveness Analysis.

AL1.1.37. CONOPS. Concept of Operations.

AL1.1.38. CONPLAN. Concept Plan.

AL1.1.39. CONUS. Continental United States.

AL1.1.40. COTS. Commercial Off-The-Shelf (i.e., Software).

AL1.1.41. CPR. Computer-Based Patient Record.

AL1.1.42. CRAF. Civil Reserve Air Fleet.

AL1.1.43. CRTS. Casualty Receiving and Treatment Ship.

AL1.1.44. CSH. Combat Support Hospital.

AL1.1.45. CTSC. Combat Trauma Surgery Committee.

AL1.1.46. CW. Chemical Warfare.

AL1.1.47. DAAS. Defense Automated Addressing System.

AL1.1.48. DAMES. DAAS Office Automated Message Exchange System.

AL1.1.49. DBSS. Defense Blood Standard System.

AL1.1.50. DC. Dental Corps.

AL1.1.51. DDN. Defense Data Network.

AL1.1.52. DDR&E. Director, Defense Research and Engineering.

AL1.1.53. DEPMEDS. Deployable Medical Systems.

AL1.1.54. DHHS. Department of Health and Human Services.

AL1.1.55. DII. Defense Information Infrastructure.

AL1.1.56. DISA. Defense Information Systems Agency.

AL1.1.57. DISN. Defense Information System Network.

AL1.1.58. DLA. Defense Logistics Agency.

AL1.1.59. DMHRS. Defense Medical Health Resource System.

AL1.1.60. DMLSS. Defense Medical Logistics Standard System.

AL1.1.61. DMRTEC. Defense Medical Readiness Training and Education Council.

AL1.1.62. DMRTI. Defense Medical Readiness Training Institute.

AL1.1.63. DMSB. Defense Medical Standardization Board.

AL1.1.64. DNA. Deoxyribonucleic Acid.

AL1.1.65. DNBI. Disease and Nonbattle Injury.

AL1.1.66. DoD. Department of Defense.

AL1.1.67. DPG. Defense Planning Guidance (reference (d).

AL1.1.68. DPSC. Defense Personnel Support Center.

AL1.1.69. DU. Depleted Uranium.

AL1.1.70. ER. Emergency Room.

AL1.1.71. FDA. Food and Drug Administration.

AL1.1.72. FEMA. Federal Emergency Management Agency.

AL1.1.73. FH. Field Hospital.

AL1.1.74. FMCBC. Field Management of Chemical and Biological Casualties Course.

AL1.1.75. FRP. Federal Response Plan.

AL1.1.76. FTX. Field Training Exercise.

AL1.1.77. FY. Fiscal Year.

AL1.1.78. FYDP. Future Year Defense Program.

AL1.1.79. GAO. General Accounting Office.

AL1.1.80. GCCS. Global C^2 System.

AL1.1.81. GCSS. Global Command Support System.

AL1.1.82. GME. Graduate Medical Education.

AL1.1.83. GMO. General Medical Officer.

AL1.1.84. GOTS. Government Off-the-Shelf (i.e., Software).

AL1.1.85. G6PD. G6PD. Glucose-6-Phosphate Dehydrogenase.

AL1.1.86. GPMRC. Global Patient Movement Requirements Center.

AL1.1.87. HSRS. Health Service Resource System.

AL1.1.88. HSS. Health Service Support.

AL1.1.89. ICA. Industrial Capability Assessment.

AL1.1.90. ICD-9. International Classification of Diseases (of the World Health Organization), 9th Revision.

AL1.1.91. ICMOP. Integrated CONUS Medical Operations Plan.

AL1.1.92. ID. Identification.

AL1.1.93. IG, DoD. Inspector General of the Department of Defense.

AL1.1.94. IMA. Individual Mobilization Augmentee.

AL1.1.95. IMLG. Integrated Medical Logistics Group.

AL1.1.96. IND. Investigational New Drug.

AL1.1.97. INMARSAT. International Maritime Satellite.

AL1.1.98. IPP. Industrial Preparedness Planning.

AL1.1.99. IPS. Illustrative Planning Scenario.

AL1.1.100. ITRO. Inter-Service Training Review Organization.

AL1.1.101. JITC. Joint Interoperability Test Command.

AL1.1.102. JMREC. Joint Medical Readiness Education Council.

AL1.1.103. JMPC. Joint Medical Planners Course.

AL1.1.104. JMRTC. Joint Medical Readiness Training Center.

AL1.1.105. JNBCDMB. Joint Nuclear, Biological, and Chemical Defense Management Board.

AL1.1.106. JOPES. Joint Operations Planning and Execution System.

AL1.1.107. JPMPG. Joint Preventive Medicine Planning Group.

AL1.1.108. JROC. Joint Readiness Oversight Council.

AL1.1.109. JSCP. Joint Strategic Capabilities Plan.

AL1.1.110. JSIG. Joint Service Integration Group.

AL1.1.111. JSMG. Joint Service Materiel Group.

AL1.1.112. JTA. Joint Telecommunications Architecture.

AL1.1.113. JTAV. Joint Total Asset Visibility.

AL1.1.114. JTTPs. Joint Tactics, Techniques, and Procedures.

AL1.1.115. JULLS. Joint Uniform Lessons Learned System.

AL1.1.116. JWID. Joint Warrior Interoperability Demonstration.

AL1.1.117. MAD. Medical Anchor Desk.

AL1.1.118. MAISRC. Major Automated Information System Review Council.

AL1.1.119. MARC. Multi-technology Automated Reader Card.

AL1.1.120. MASH. Mobile Army Surgical Hospital.

AL1.1.121. MAT. Medical Analysis Tool.

AL1.1.122. MBP 2004. Military Blood Program (2004) (Reference (m).

AL1.1.123. MCS. Managed Care Support.

AL1.1.124. MENW. Medical Effects of Nuclear Weapons Course.

AL1.1.125. MEPES. Medical Planning and Execution System.

AL1.1.126. MHS. Military Health System.

AL1.1.127. MLPS. Medical Logistics Proponent Subcommittee (of the Medical Functional Steering Committee).

AL1.1.128. MMCBC. Medical Management of Chemical and Biological Casualties Course.

AL1.1.129. MNS. Mission Needs Statement.

AL1.1.130. MOE. Measures of Effectiveness.

AL1.1.131. MOOTW. Military Operations Other Than War.

AL1.1.132. MOPs. Measures of Performance.

AL1.1.133. MOPP. Mission Oriented Protective Posture.

AL1.1.134. MPM. Medical Planning Module (of JOPES).

AL1.1.135. MRC. Major Regional Contingency and/or Conflict.

AL1.1.136. MRSP. Medical Readiness Strategic Plan.

AL1.1.137. MSCA. Military Support to Civil Authorities.

AL1.1.138. MTF. Medical Treatment Facility.

AL1.1.139. NBC. Nuclear, Biological, and Chemical.

AL1.1.140. NDMS. National Disaster Medical System.

AL1.1.141. NEO. Noncombatant Evacuation Operations.

AL1.1.142. NSAID. National Security and International Affairs Division.

AL1.1.143. NSN. National Stock Number.

AL1.1.144. NW. Nuclear Warfare.

AL1.1.145. OASD(HA). Office of the Assistant Secretary of Defense for Health Affairs.

AL1.1.146. OASD(HA)(C&PP). Office of the Assistant Secretary of Defense for Health Affairs (Clinical and Program Policy).

AL1.1.147. OASD(HA)(HB&FP). Office of the Assistant Secretary of Defense for Health Affairs (Health Budgets and Financial Policy).

AL1.1.148. OASD(HA)(HOP). Office of the Assistant Secretary of Defense for Health Affairs (Health Operations Policy).

AL1.1.149. OCONUS. Outside Continental United States.

AL1.1.150. ODS. Operations DESERT SHIELD and/or DESERT STORM.

AL1.1.151. OEG. Operational Exposure Guidance.

AL1.1.152. OPLAN. Operation Plan.

AL1.1.153. OPTEMPO. Operations Tempo.

AL1.1.154. ORD. Operational Requirement Document.

AL1.1.155. OSD. Office of the Secretary of Defense.

AL1.1.156. PAs. Physicians Assistants.

AL1.1.157. PAO. Primary Action Office.

AL1.1.158. PAR. Population at Risk.

AL1.1.159. PARRTS. Patient Accounting and Reporting Realtime System.

AL1.1.160. PCs. Patient Conditions.

AL1.1.161. PIC. Portable Information Carrier.

AL1.1.162. PM. Preventive Medicine.

AL1.1.163. PMI. Patient Movement Items.

AL1.1.164. PMO. Program Management Office.

AL1.1.165. POE. Point of Embarkation.

AL1.1.166. POM. Program Objective Memorandum.

AL1.1.167. PPE. Personal Protective Equipment.

AL1.1.168. PPIP. Put Prevention Into Practice.

AL1.1.169. PSRC. Presidential Selective Reserve Call-up.

AL1.1.170. QSTARS-MS2. Quad Service Satellite Transmission and Receiving System - Medical Supply Support.

AL1.1.171. RCD. Required Completion Date.

AL1.1.172. R&D. Research and Development.

AL1.1.173. RES. Radiation Exposure State.

AL1.1.174. RN. Registered Nurse.

AL1.1.175. RTS-MED. Medical Regional Training Sites.

AL1.1.176. SALTS. Streamlined Alternative Logistics Transmission System.

AL1.1.177. SG. Surgeon General.

AL1.1.178. SHADE. Shared Data Environment.

AL1.1.179. SIMLM. Single Integrated Medical Logistics Management.

AL1.1.180. SOP. Standard Operating Procedures.

AL1.1.181. TBTC. Transportable Blood Transshipment Center.

AL1.1.182. TDBSS. Theater Defense Blood Standard System.

AL1.1.183. TEMP. Test and Evaluation Master Plan.

AL1.1.184. TMA(IMT&R). TRICARE Management Activity (Information Management Technology and Re-Engineering).

AL1.1.185. TMA(MA&HP). TRICARE Management Activity (Medical Affairs and Health Programs).

AL1.1.186. TMA(MHSO). TRICARE Management Activity (Military Health Systems Operations).

AL1.1.187. TMIP. Theater Medical Information Program.

AL1.1.188. TPFDD. Time Phased Force Deployment Database.

AL1.1.189. TPMRC. Theater Patient Movement Requirements Center.

AL1.1.190. TRAC^{2}ES. TRANSCOM Regulating and Command & Control Evacuation System.

AL1.1.191. TRC. TRICARE Readiness Committee.

AL1.1.192. TTPs. Tactics, Techniques, and Procedures.

AL1.1.193. VA. Department of Veteran's Affairs.

AL1.1.194. VTC. Video Teleconference.

AL1.1.195. VTT. Video Tele-Training.

AL1.1.196. USACOM. U.S. Atlantic Command.

AL1.1.197. USCENTCOM. U.S. Central Command.

AL1.1.198. USEUCOM. U.S. European Command.

AL1.1.199. USPACOM. U.S. Pacific Command.

AL1.1.200. USTRANSCOM. U.S. Transportation Command.

AL1.1.201. USUHS. Uniformed Services University of Health Sciences.

AL1.1.202. UTC. Unit Type Code.

AL1.1.203. WHO. World Health Organization.

AL1.1.204. WR. War Reserve.

AL1.1.205. Y2K. Year 2000.

C1. CHAPTER 1

PLAN OVERVIEW

C1.1. BACKGROUND

C1.1.1. In 1988, the Department of Defense published the first MRSP (reference (a)) in response to a Congressional mandate to "develop an integrated master plan for curing the ills of the wartime medical readiness system by the end of FY 1992." The vision and objectives of that Plan were right on target for the scenarios and the international security environment that prevailed at that time. Not long after the original MRSP was fielded, efforts to implement the MRSP were overcome by major world and national events that radically altered the global security picture, and ultimately reshaped U.S. National Military Strategy.

C1.1.2. Early in FY 1994, the ASD(HA) re-energized the strategic planning and execution process, and produced the MRSP 2001 (reference (b)). Reference (b) was developed and staffed in 1994 and was published in March 1995. Since March 1995, much progress has been made toward implementing the MRSP. PAOs submitted implementation plans that contained more than 1300 individual implementation milestones, of which 62 percent have been completed.

C1.1.3. The MRSP is an active strategic plan. Just as progress has been made toward resolving the problems presented in the MRSP, the Plan has also grown. Between November 1995 and March 1996, the following four new Chapters were added to the MRSP: "MOOTW", "NBC Defense," "R&D", and "PM". Implementation of those new Chapters is also well underway.

C1.1.4. While developing the new Chapters for this MRSP, it was recognized that the original Chapters were becoming dated. Many tasks were completed. Situations and policies had changed, causing some tasks to be obsolete. The Plan was in need of some general housekeeping. Therefore, a series of panels was conducted to review and revise the original Chapters.

C1.1.5. As a result, this new MRSP 2004 Plan is a more direct and efficient strategic plan. This Plan was streamlined by removing 12 Action Plans. Those Action Plans were either completed or mostly completed. The orphaned tasks were consolidated into other Action Plans. Instead of keeping tasks as open ended items, each task was given a required completion date. Finally, each Action Plan’s tasks

were prioritized and presented in priority order with "1" being the highest priority task for an Action Plan.

C1.1.6. Year 2000 (Y2K) compliance of medical readiness related information technology must be addressed and compliance assurance provided. Information technology and communication systems that the MHS relies on to meet it's medical readiness mission must undergo the five-step Y2K compliance assurance process that has been defined for use within DoD, and that has been further tailored to the MHS in the MHS Year 2000 Management Plan. The MRSP 2004 includes language to identify where readers should consider Y2K implications and, where appropriate, points to specific Y2K guidance documents.

C1.1.7. Finally, this MRSP 2004 documents the problems in medical readiness that need to be resolved in the next 6-year period. It is now the responsibility of the PAOs to develop implementation plans for the resolution of problems.

C1.2. MEDICAL READINESS VISION

C1.2.1. The military medical departments exist to support their combat forces in war and in peacetime, to maintain and sustain the well being of the fighting forces in preparation for war. The military medical departments must be prepared to respond effectively and rapidly to the entire spectrum of potential military operations - from major regional contingencies to MOOTW.

C1.2.2. Preparation for wartime and/or contingency operations includes the identification of the medical threat, development of the medical organizations and systems to support potential combat scenarios, training medical units and personnel for their wartime roles, training non-medical personnel in medical subjects, medical research to discover new techniques and materiel to conserve the fighting strength, and providing both preventive and restorative health care to the military force.

C1.2.3. In peacetime, the medical systems and organizations for wartime support, when not employed in preparation and training for the wartime role, are used to provide health care to other eligible beneficiaries.

C1.2.4. Recent changes in the foreign and domestic policy of the United States have significant impact on the Defense medical community. Those policies, coupled with budget and personnel reductions in the Armed Forces, challenge the DoD ability to successfully accomplish the primary military medical mission: "to provide top quality health services, whenever needed, in support of military operations."

C1.2.5. The new international security environment was shaped in part by the collapse of communism within the former Soviet Union and the use of a multi-national coalition force in ODS. The conclusion of the Cold War has caused a refocusing of U.S. national strategy from a major global encounter to one of regional conflicts. In the first major regional conflict of the post-Cold War era, Southwest Asia, the U.S. embraced a multi-national coalition force to successfully liberate Kuwait. The global environment of multiple regional threats dictates a change in the U.S. approach to resolve international conflicts that threaten U.S. national security interests or U.S. allies.

C1.2.6. As an adjunct to U.S. national security interests, the United States envisions humanitarian assistance as an additional mission for the Armed Forces. Domestically, there is great uncertainty about new roles and missions that the military may be assigned. The use of military resources within the United States for non-military missions (e.g., Civil-Military Cooperative Action projects) is currently being tested and encouraged. The pursuit of those initiatives clearly marks a departure from U.S. past requirements.

C1.2.7. The call for a greatly reduced standing military force challenges the Department of Defense to provide national security at a reduced cost. As the United States seeks a greater benefit to cost ratio from military programs and support requirements, domestic programs may be undertaken as resources permit. However, medical readiness and/or capability must be protected to ensure U.S. ability to rapidly respond to U.S. primary mission requirements. During these uncertain times, the medical community must become even more cost conscious and innovative in preparing for the future.

C1.2.8. At the direction of the President, the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the Services are aggressively pursuing unified force health protection strategies to protect Service members from health hazards associated with Military Service. There is clear recognition of the importance of protecting U.S. forces in every operation and throughout their Military Service. The goal of the President, and the Department of Defense, is a healthy and fit force, fully protected from all potential health hazards, especially during deployments.

C1.2.9. Force health protection is a strategy that builds on the lessons of the Gulf War as well as the tenets contained in the National Military Strategy and Chairman of the Joint Chiefs of Staff's Joint Vision 2010 (reference (c). That strategy relies on the MHS for successful implementation, providing comprehensive health care equal or

better than civilian care, and providing clinical care targeting health and fitness and optimal physical and emotional well-being for Service members and their families. During deployments, supporting the theater commanders with health surveillance and contingency health support, integrated among the Services to optimize support throughout the operational spectrum - from casualty prevention through extensive medical support forward and definitive health support stateside.

C1.2.10. Given those new conditions, the DoD medical community must assess, validate, prioritize, and revise policies and program resources over the next program cycle extending into the next century. This Plan lays the foundation for the future, and its success or failure will have lasting impact on military medicine.

C1.2.11. The medical capability necessary to support the continuum of military operations depicted in current DPG, FY 2000 - 2005 (reference (d)) requires the following:

C1.2.11.1. Integrated preventive medicine services for the DoD community, ensuring a healthy, fit fighting force.

C1. Military health-care providers who are physically fit to deploy, and who are highly trained and proficient in the art of military medicine.

C1.2.11.3. Military health-care personnel trained with the supplies and equipment of their respective deployable platforms and units.

C1.2.11.4. Military (medical and non-medical) leaders at all levels who are well grounded in military medical doctrine, tactics, techniques, and procedures.

C1.2.11.5. Mission capable medical units and individuals who are ready for rapid mobilization and strategic deployment to sustain medical support for any mission within the operational spectrum.

C1.2.11.6. Units with increased flexibility and mobility that can be tailored for a variety of potential missions.

C1.2.11.7. A medical evacuation system that incorporates multiple evacuation platforms into a seamless intra- and inter-theater patient evacuation system, and that employs interoperable patient movement items that function on any evacuation platform.

C1.2.11.8. Medical information management systems that accommodate

command and control, medical logistics, and patient accountability, and that are integrated into the DoD common operating environment and data architecture.

C1.2.11.9. Medical units and/or platforms and evacuation vehicles equipped to communicate by voice and other electronic means with supporting and supported forces, and across Service lines.

C1.2.11.10. Senior leaders who recognize advancements in medical practice and technologies, through training and acquisition initiatives, which sustain U.S. ability to provide medical care during any contingency and under the most austere conditions.

C1.2.11.11. A logistics system that provides reliable, responsive, and timely support when and where it is needed from the "factory to the foxhole."

C1.3. PURPOSE

C1.3.1. The purpose of this Plan is to provide the Department of Defense with an integrated, coordinated and synchronized Plan for achieving and sustaining medical readiness through the year 2004 and beyond. It is the DoD guide book by which the Department of Defense will achieve a fully capable military health-care system ready to support the continuum of military operations.

C1.3.2. This MRSP 2004 is a long range Plan that supports execution of the full array of strategic planning documents from the National Security Strategy of the United States to the Defense Medical Programming Guidance and associated Service Medical POMs. The Department of Defense will use this MRSP 2004 as the compass for articulating requirements and resources, and for developing policies and procedures. Medical readiness success will be measured against the objectives outlined in this MRSP 2004.

C1.4. ORGANIZATION

This MRSP 2004 is organized in 12 major functional areas. Each functional area is introduced with a concise narrative highlighting the background, current status, accomplishments and objectives. A detailed Action Plan is provided for each functional area objective; Action Plans highlight the objectives, the tasks to be accomplished, and the PAOs responsible for executing the objectives. The tasks have been prioritized by functional experts and are listed in priority order with the highest

priority tasks starting with the number 1. Also, required completion dates are provided for each task.

C1.5. METHODOLOGY

Revision of the MRSP 2001 (reference (b)) was a collaborative effort. Six joint panels were conducted to review the nine original Chapters. Panel members included representatives from the Services, the Chairman of the Joint Chiefs of Staff, and the selected offices in the OSD and the other Defense Agencies. The newest Chapters were not revised as they were developed and published within one year of the start of the revision process.

C1.6. FUNCTIONAL AREAS IN BRIEF

C1.6.1. PLANNING

C1.6.1.1. The military medical departments must develop, enhance and sustain coordinated and synchronized policies, doctrine, and training that facilitate medical planning, resourcing, and execution of joint and combined operations. Successful initiatives include development of joint medical doctrine and the establishment of career paths for medical planners. Efforts must be made to develop modern automated planning tools especially since the aged MPM is no longer available for use by planners. Also, the Services must take the necessary steps to prepare medical planners so the key medical planning billets can be filled with qualified planners who also understand the Reserve Components mobilization and manning.

C1.6.1.2. OBJECTIVES

C1.6.1.2.1. Provide medical planners with the tools they need to develop effective, executable plans.

C1.6.1.2.2. Fill medical planning billets with qualified personnel.

C1.6.2. REQUIREMENTS, CAPABILITIES, AND ASSESSMENT

C1.6.2.1. Some progress has been made such as the conversion of most militarily significant International Classification of Diseases (of the WHO), 9th Revision (ICD-9) codes to military patient condition codes for use in modeling and requirements calculations. However, much work needs to be done to develop realistic

rate sets and methods for appropriately applying rates. Planning factors have been developed for echelons three and four; however, planning factors need to be developed for echelons one, two, and five so planners can model the entire continuum of care from point of injury to CONUS based treatment.

C1.6.2.2. OBJECTIVES

C1.6.2.2.1. Establish planning factors across the continuum of care from the point of occurrence (injury and/or disease) to the CONUS-based MTF.

C1.6.2.2.2. Add medical requirements to all wargaming activities, and develop interfaces between wargaming tools and existing and/or future medical models.

C1.6.2.2.3. Develop real-world standardized patient load data with modern patient condition codes enabling planners to forecast medical workload and resource requirements.

C1.6.3. C4IM

C1.6.3.1. The military medical community must develop a standardized, integrated and seamless system of medical C^2 within the GCCS and GCSS. That system should include the capability to display a real-time medical situational awareness picture to support command and control, medical logistics, and patient accountability. The Department of Defense must define DoD integrated communications requirements, and develop an acquisition strategy that accommodates advanced technology add-ons and provides the Department of Defense with reliable and continuous voice, text, data, visual and position location communications that are integrated with DoD and/or MHS technical and data architectures and are with the DII COE standards. Actions must be taken to ensure Y2K compliance of all associated information technology and/or communications capabilities. Finally, the Department of Defense must move quickly into the future by developing a modern medical information system.

C1.6.3.2. OBJECTIVES

C1.6.3.2.1. Develop, acquire, deploy, and sustain a joint medical communication infrastructure that supports the entire continuum from operational to peacetime facilities and uses common telecommunications systems such as the DISN to the maximum extent practical with a robust, multi-tiered, and seamless. Infrastructure must have the necessary communications capabilities to be interoperable with the global communications architecture of the Combatant Commands and

Services.

C1.6.3.2.2. Develop a joint medical situational awareness system that supports command and control, medical logistics, and patient in-transit visibility and is linked with GCCS and GCSS.

C1.6.3.2.3. Provide a seamless, interoperable medical information system with GCSS that supports contingency operations across all echelons of care and complies with data standards within the SHADE to promote data sharing and data quality.

C1.6.4. LOGISTICS

C1.6.4.1. Medical logistics organizations, policies and procedures supporting joint medical operations must keep pace with new defense strategies and logistics demands. Modern business practices must be developed, which exploit commercial logistics bases and just-in-time inventories. With the completion of the major procurement phase of DEPMEDS, the Department of Defense must now focus on sustaining and modernizing DoD deployable medical equipment. The SIMLM systems must be enhanced with automated support systems linked by integrated communications. The Department of Defense must aggressively pursue the DMLSS system. Actions must be taken to ensure Y2K compliance of all associated technology and/or communications capabilities. Joint medical logistics doctrine must also be addressed.

C1.6.4.2. OBJECTIVES

C1.6.4.2.1. Integrate multiple independent acquisition and planning initiatives into a single seamless Plan to ensure that Combatant Command requirements are met.

C1.6.4.2.2. Ensure that medical assemblages and non-medical material are maintained, refurbished, and modernized in a timely manner to provide quality medical care and capability to support operational requirements.

C1.6.4.2.3. Provide jointly interoperable medical logistics information management systems within GCCS and GCSS and communication systems, within the Defense Information Infrastructure which allow the transmission and exchange of logistics data within a theater of operations and with supporting logistics organizations.

C1.6.4.2.4. Create a worldwide, medical logistics system capable of

tracking and delivering materiel from the factory to the foxhole to meet stated medical readiness requirements.

C1.6.4.2.5. Ensure that PMI are standard, available, and interoperable between the Services, and are operable aboard evacuation aircraft by developing a system to acquire, certify, track, maintain, and recover PMI.

C1.6.5. MEDICAL EVACUATION

C1.6.5.1. DoD medical evacuation systems must be comprehensively reviewed to ensure that the Department of Defense has trained and ready resources capable of supporting the continuum of care with shorter theater evacuation policies and shorter lengths of stay. The Department of Defense must assess U.S. total ground, sea, and air evacuation requirements, and maximize the potential for each platform to support military operations. It is imperative for the Army and the Marine Corps to evaluate requirements and modernize evacuation capabilities in order to meet assigned battlefield missions. Plans for CONUS casualty reception and distribution must be fully developed. Actions must be taken to ensure Y2K compliance of all associated information technology and/or communications capabilities.

C1.6.5.2. OBJECTIVES

C1.6.5.2.1. Define patient evacuation requirements that accommodate shorter theater evacuation policies or changes in length of stay by all the Services.

C1.6.5.2.2. Develop CONUS casualty reception and distribution plans.

C1.6.5.2.3. Develop a seamless capability for medical evacuation that includes rotary-wing, fixed-wing, land, and sea assets.

C1.6.5.2.4. Develop joint policy for the movement of contaminated patients.

C1.6.5.2.5. Develop and execute a program to produce and/or modernize evacuation platforms.

C1.6.6. MANPOWER AND PERSONNEL

C1.6.6.1. U.S. manpower systems and procedures must focus on meeting wartime requirements within assigned end strengths. The United States must carefully manage the appropriate mix of AC and Reserve component medical forces; and

enhance the assignment, training, and sustainment of health care personnel. Finally, the Department of Defense must continue to recruit and retain qualified health-care personnel and determine guidelines for Reserve component/AC mix for medical across Service lines.

C1.6.6.2. OBJECTIVES

C1.6.6.2.1. Recruit and retain sufficient qualified active and Reserve medical personnel to meet military medical operational requirements by specialty and grade.

C1.6.6.2.2. Ensure that a consistent set of medical and dental deployability and personnel criteria is used by all the Services.

C1.6.7. TRAINING

C1.6.7.1. Although medical readiness training policy has been established in DoD Instruction 1322.24 (reference (e)) complete implementation of the training policies continues to be lacking. DMRTEC must continue their efforts to define medical readiness training standards, joint training requirements, and resources required; and reassess the missions, roles, and responsibilities of the DMRTI. Simultaneously, the Healthcare Committee of the ITRO must aggressively pursue a review of all functional, medical, technical, and operations training as directed by the Chairman of the Joint Chiefs of Staff. Where possible, the Department of Defense must combine training to reduce costs. Worldwide, medical participation in joint and combined exercises has decreased. That trend must be turned around to incorporate employment of active and Reserve assets.

C1.6.7.2. OBJECTIVES

C1.6.7.2.1. Establish a DoD system to provide and monitor medical readiness training.

C1.6.7.2.2. Develop a mechanism to ensure DoD-wide interoperability for unique operational areas.

C1.6.7.2.3. Maximize DoD-wide utilization of regional field training sites to enhance interoperability and shared training of medical personnel.

C1.6.7.2.4. Maximize opportunities for AC and Reserve component medical interface in Service-specific and Joint and/or Combined exercises.

C1.6.8. BLOOD

C1.6.8.1. The Department of Defense must maintain a strong, viable ASBP capable of providing modern blood products to worldwide customers, supporting the full spectrum of military operations. The Department of Defense must continue to meet FDA blood regulations and guidelines; coupled with the deployment of the DBSS, the Department of Defense will greatly facilitate standardization and quality assurance in the delivery of safe blood products and services to DoD customers. The frozen blood system distribution Plan must be expeditiously completed to ensure designated Combatant Commands can meet their wartime blood requirements. Finally, the Department of Defense must exploit and incorporate new blood technologies as they become available to improve the efficiency and safety of the military blood program. Actions must be taken to ensure Y2K compliance of all associated information technology and/or communications capabilities.

C1.6.8.2. OBJECTIVES

C1.6.8.2.1. Maintain an ASBP through the Services which provides cost effective and quality blood products to meet all DoD requirements.

C1.6.8.2.2. Develop joint blood doctrine to support Combatant Command requirements.

C1.6.8.2.3. Develop and maintain peacetime blood operations, which support the continuum of operations.

C1.6.8.2.4. Continually update wartime blood capabilities based on the DPG (reference (d)) and develop programs, doctrine, policies and procedures to ensure implementation.

C1.6.8.2.5. Improve safety, efficacy, and availability of blood products to meet all contingencies by supporting, monitoring, and assisting transfusion medicine related research of fibrin tissue adhesives, red cells, platelets, plasma, and their substitutes, and incorporate new technologies (e.g., rapid test procedures and automated system for injectable water), as they become available.

C1.6.9. MOOTW

C1.6.9.1. There is a need for more clarity in acquisition programming and operations planning for MOOTW. Key planning issues are improved planning

coordination with DoD and non-DoD Agencies and/or organizations, clarity of mission statement, transition planning, exit strategies, and MOEs. There is also a need to enhance joint, combined and multi-Agency training in MOOTW across the total force to include the TRICARE MCS contractors, non-DoD organizations and other Government Agencies.

C1.6.9.2. OBJECTIVE. Develop a clear mission statement supported by concise objectives, reasonable endpoints, and MOEs for the MHS in MOOTW (Foreign and Domestic).

C1.6.10. NBC DEFENSE

C1.6.10.1. Despite DoD steps to improve U.S. Forces readiness to operate in an NBC environment, serious weaknesses remain. Deficiencies in medical and non-medical NBC CMs must be addressed. Existing disease surveillance and field diagnostic capabilities must be improved for early detection and identification of NBC agents. Procedures for handling contaminated casualties must be developed as a priority. Joint medical doctrine, including "patient evacuation," in Joint Pub 4-02 (reference (f)) should balance the two objectives of ensuring the survivability of personnel and contributing to the recovery of U.S. Forces' operating tempo following an NBC attack. Joint doctrine needs to be developed to address operations in low-level radiation environments. Finally, NBC training requires significant improvement.

C1.6.10.2. OBJECTIVES

C1.6.10.2.1. Ensure joint, integrated planning, development and implementation of practical and effective medical NBC CMs, including diagnostics, prophylactics, therapy, and exposure management, when possible.

C1.6.10.2.2. Manage personnel exposed to NBC environments to maximize their ability to recover and sustain military operations and critical functions, to prevent incapacitation and death, and to otherwise mitigate the impact of NBC attack on the operational environment.

C1.6.10.2.3. Ensure integrated planning, development, and implementation of a rapid, seamless and responsive medical and/or environmental surveillance, detection and tracking system using DoD and/or MHS data architecture and standards.

C1.6.10.2.4. Ensure joint and integrated training for NBC defense and

medical management of NBC casualties to include rapid assessment, decontamination, and appropriate patient management.

C1.6.10.2.5. Ensure development of new doctrine and medical policies, equipment training, and research requirements that are needed to conduct the full range of military operations in all radiation (ionizing and non-ionizing) environments.

C1.6.11. R&D

C1.6.11.1. The primary medical readiness biomedical R&D issues are as follows. The Department of Defense needs the ability to collect, analyze, evaluate, and prioritize military operational needs that can be met through biomedical R&D. They also need to better coordinate biomedical R&D execution, including coordination of Service efforts, integration of R&D products into the force, and maintenance of technical competencies.

C1.6.11.2. OBJECTIVES

C1.6.11.2.1. Establish a capability to collect, review, integrate and prioritize biomedical R&D-related military operational needs of the Department of Defense in order to deliver a DoD-wide coordinated needs list annually to support intelligent allocation of biomedical R&D resources.

C1.6.11.2.2. Ensure that the military biomedical R&D program is coordinated, integrated, and executed to meet joint and Service needs to provide operational support to the warfighter.

C1.6.12. PM

C1.6.12.1. PM is a functional area that permeates the entire MHS. Greater efforts need to be made to ensure that PM is included in Combatant Command planning. The PM planning procedures should include improved PM coordination with DoD and non-DoD Agencies and organizations, early PM assessments to include health risk assessments of NBC and industrial chemical contaminated deployment areas, and MOEs as well as assignment of key medical personnel to Combatant Command staffs. New accession standards must be developed to ensure that new accessions are physically and mentally fit for Military Service. Standardized and automated procedures to collect and monitor the medical and/or dental status of the total force during peacetime and contingencies must be developed and made available to the Commanders. Prevention training must be included in all military education systems to ensure that all commanders and their NCOs understand their role and are

prepared to implement and manage effective force protection measures. Finally, the Department of Defense must develop policies and procedures for the safe transportation of potentially infectious patients and hazardous medical samples.

C1.6.12.2. OBJECTIVES

C1.6.12.2.1. Develop the capability to continuously assess total force health and fitness to provide military leaders with evidence-based tools for decision making.

C1.6.12.2.2. Identify or develop appropriate, standardized MOEs and MOPs for DoD health promotion and disease and/or injury prevention programs.

C1.6.12.2.3. Provide comprehensive, accurate, timely medical information and intelligence addressing the full spectrum of anticipated contingencies.

C2. CHAPTER 2

PLANNING

C2.1. INTRODUCTION

C2.1.1. "The Goldwater-Nichols Department of Defense Reorganization Act of 1986" (10 U.S.C. 161, reference (g)) has increased the joint mindset of the Military Departments and strengthened the roles of the Commanders of the Combatant Commands. All functional areas are emphasizing joint planning and joint use of assets.

C2.1.2. That trend will only accelerate during times of shrinking resources by all of the Services. While the Military Departments will retain their Service-specific tasks, they must closely plan joint and combined use of assets to ensure accomplishment of the assigned mission. That is especially true for the multi-national operations the Department of Defense is undertaking worldwide.

C2.1.3. ACs must be trained in the Reserve component integration including contributory support, recall, and mobilization.

C2.2. BACKGROUND

C2.2.1. Joint medical planning has progressed considerably from the rudimentary efforts of the early and mid-1980's. There is now a medical annex in each OPLAN that is compiled in the same manner as any other annex, and goes through the same scrutiny as part of the sustainability analysis process.

C2.2.2. The medical annex is included within the OPLAN and is forwarded to the Chairman of the Joint Chiefs of Staff for review and approval. The approved OPLAN is then the basis for the supporting plans prepared by the Service Components and the supporting Combatant Commands.

C2.2.3. During the planning cycle, all joint medical requirements are identified by the Commanders of the Combatant Commands (the Service Components) and sourced by the appropriate Service. Examples of joint medical capabilities include the Joint Blood Program, Army medical evacuation helicopter direct support to Navy hospital ships, and the use of Army medical logistics units as a theater-wide system for all the Services under the SIMLM concept.

C2.2.4. The ability to produce the detailed medical annexes in the various OPLANs is directly tied to the availability of trained and experienced medical planners at the Combatant Commands and their components, the Service staffs, and the Chairman of the Joint Chiefs of Staff. The lack of experienced planners, schooled in all aspects of the various operational planning systems, was a particular problem during ODS.

C2.3. ACCOMPLISHMENTS

C2.3.1. Since 1995 much progress has been made toward resolution of many DoD medical planning issues. The following are some of the issues that have been resolved.

C2.3.1.1. The Service Medical Doctrine Centers were integrated with Service Doctrine Centers.

C2.3.1.2. All the Services have established medical plans and operations career paths.

C2.3.1.3. The Services have identified and coded billets requiring qualified medical planners.

C2.3.1.4. Joint medical planning billets have been identified and validated.

C2.3.1.5. Most problems regarding equal advancement opportunities for medical planners have been resolved.

C2.4. CURRENT STATUS

C2.4.1. The MAT has replaced the MPM as the only approved joint medical requirements generator for planning.

C2.4.2. The only specialized training available to joint medical planners is the JMPC. The JMPC, while a major step forward, only provides the students with a rudimentary knowledge in the many areas covered in the course. The JMPC curriculum is continually revised to stay current with advances and changes in the field. There is a myriad of information available that would serve to enhance the training provided by the JMPC. That information should be consolidated into a readily accessible media.

C2.5. OBJECTIVES

C2.5.1. Provide medical planners with the tools they need to develop effective and executable plans.

C2.5.2. Fill medical planning billets with qualified personnel.

C3. CHAPTER 3

REQUIREMENTS, CAPABILITIES, AND ASSESSMENT

C3.1. INTRODUCTION

The models and input data used to determine wartime requirements were developed to support a global war. The post Cold War geopolitical situation has driven a requirement for new, flexible planning tools to support military medical operations identified in Joint Vision 2010 (reference (c)). Actions must be taken in accordance with the MHS Y2K Management Plan and other related MHS and DoD guidance to ensure Y2K compliance of all associated information technology and/or communications capabilities.

C3.2. BACKGROUND

C3.2.1. MAT is the only approved medical requirements generator for operational planning. Traditionally, medical planners have calculated requirements from echelon 3 medical care and above with echelons 1 and 2 being based on Service force structure requirements. Using the appropriate casualty rates, MAT can calculate medical requirements down to echelon 2. MAT can obtain timed phased force information directly from the TPFDD.

C3.2.2. The TPFDD provides the most accurate data on the U.S. Force PAR. The MAT computes bed requirements, blood, evacuee, and other logistic lift requirements. It was primarily used by the Combatant Commands and the Service Component commands to aid in developing the medical annex of their OPLANs. The Joint Staff employed the MAT during OPLAN review, special studies, and the Program Assessment by the Chairman of the Joint Chiefs of Staff.

C3.2.3. Many of the DoD contingency medical support programs are founded on casualty rate applications that are, at best, difficult to defend. The Services employed "Service-specific" planning factors to compute bed requirements in support of POM development.

C3.3. ACCOMPLISHMENTS

C3.3.1. Many changes have occurred in the Requirements, Capabilities and

Assessment functional area since the MRSP 2001 (reference (b)) was published.

C3.3.1.1. MAT was fielded to the Combatant Commands and the Services in January 1998 for planning.

C3.3.1.2. The Chairman of the Joint Chiefs of Staff sponsored a study of historical casualty rates for conventional ground forces to determine the best approach for casualty rate estimation. That study resulted in a methodology for selecting casualty rates for use in medical requirements determination.

C3.3.1.3. Most wartime significant ICD-9 codes have been linked to the DMSB PCs that are used in medical modeling and simulation.

C3.4. CURRENT STATUS

C3.4.1. The Chairman of the Joint Chiefs of Staff has approved the MAT for use by Combatant Command planners. It provides added flexibility to the Commander of a Combatant Command and the Service Component planning staffs to develop medical support requirements based on multiple scenarios.

C3.4.2. There are difficulties in obtaining the needed rates, or agreeing on the comparability of rates from different sources. The operational situations those rates are being applied to are ill defined. Consequently, greater communication between rate developers and users is required. That communication can be facilitated by developing clearly defined operational situations in terms of measurable variables. The potential of augmenting data from medical records with data generated by combat simulations and wargaming should be explored.

C3.5. OBJECTIVES

C3.5.1. Establish planning factors across the continuum of care from the point of occurrence (injury and/or disease) to the CONUS-based MTF.

C3.5.2. Add medical requirements to all wargaming activities, and develop interfaces between wargaming tools and existing and/or future medical models.

C3.5.3. Develop real-world standardized patient load data with modern patient condition codes enabling planners to forecast medical workload and resource requirements.

C4. CHAPTER 4

C4IM

C4.1. INTRODUCTION

C4.1.1. C4IM systems must be "seamless." That is, they must be as follows:

C4.1.1.1. Enable vertical and horizontal information transfer throughout the continuum of medical support and permitting uninterrupted operational capability before, during, and following contingencies.

C4.1.1.2. Interoperable between functional areas, the Services, and the Components.

C4.1.1.3. Ensure global connectivity.

C4.1.1.4. Have a common "look and feel" among all sub-systems.

C4.1.1.5. Provide ready access to all authorized users.

C4.1.1.6. Ensure actions are taken in accordance with the MHS Y2K Management Plan and other related MHS and DoD guidance to ensure Y2K compliance of all associated information technology and/or communications capabilities.

C4.1.2. This Chapter addresses those essential characteristics under three separate categories of systems:

C4.1.2.1. C^2 - includes the policy, guidance, training, modeling, simulation, and situational awareness requirements for effective planning, programming, and execution of medical support.

C4.1.2.2. *Communications* - addresses the resource, hardware, and training requirements to ensure that the medical structure has adequate capabilities including trained users to communicate across the operational continuum.

C4.1.2.3. *Information Management* - covers medical information as an essential element of medical communications, and command and control and intelligence on foreign medical/health threats, health-care facilities, and capabilities.

C4.2. BACKGROUND

C4.2.1. Fundamental changes in worldwide security conditions after 1989 heralded the end of the Cold War and transition to a period of changing requirements, focus, and priorities. The C4IFTW concept is a result of that changing focus. The MHS must participate fully in C4IFTW to provide direct support to the warfighting commander. The total MHS medical mission comprises an integrated continuum of care, from the forward edge of the battlefield through the CONUS-based MTFs to include the VA and the NDMS when activated.

C4.2.2. To accomplish its mission, the MHS must do three things. It must plan and execute; train and improve; and, most importantly, provide patient (casualty) care. To that end, TMIP functional requirements evolve from the need for the Services and the joint medical planners to conduct warfighting capability assessment, the need to reduce the medical footprint in an area of operations and the consumption of critical non-medical resources such as air and sea lift, and the need to maximize and integrate the medical capabilities and resources of the MHS across the continuum of care. The MHS must also ensure that appropriate Y2K compliance actions have been taken to avoid any adverse impacts on the medical readiness mission.

C4.2.3. The ability to field mission-capable medical units and individuals ready for rapid mobilization and strategic deployment to sustain medical support for any mission rests on timely and accurate information about those units and individuals, their capabilities, and their performance. The need for timely and accurate information is the same in peace, conflict, and operations other than war. TMIP maximizes the readiness and capability of the MHS by providing the Department of Defense with a fully capable military health-care decision support system ready to support the continuum of military operations. It provides access to integrated information that is appropriately tailored to the user’s role and level of responsibility, with particular attention to the requirements of the Commander of a Theater Combatant Command as the primary "customer" while enhancing the quality of care for the patient through ensured continuity of an individual’s MHS information.

C4.2.4. As the sources of MHS resources, the Army, Navy, and Air Force have ongoing initiatives to improve medical readiness and health care services in the operational environment. Those initiatives comprise important elements of the TMIP and must be integrated, resourced, and implemented to meet the needs of the Commanders of the Theater Combatant Commands and the Commanders of the Joint

Task Force. The TMIP is intended to provide the integration vehicle and programmatic support for these vital efforts of the Services in cooperation with higher authorities. The FEMA is conducting initiatives in medical readiness assessment, and some Allied nations are currently testing technological enhancements to improve medical readiness for theater operations. Those and other cooperative opportunities that may develop provide a rich environment in which the TMIP can coordinate and support efforts toward a seamless and global medical information system that meets the warfighter's needs.

C4.3. ACCOMPLISHMENTS

C4.3.1. Many changes have occurred in the C4IM functional area since the MRSP 2001 (reference (b)) was published in 1995. Following are some of the MRSP tasks that have been completed.

C4.3.1.1. The Chairman of the Joint Chiefs of Staff published guidance for communications planning and communications security in the medical supplement to the JSCP.

C4.3.1.2. Functional requirements and concept of operation for the Medical Personal Information Carrier were developed, approved, and forwarded for implementation within the overall DoD program.

C4.3.1.3. TMIP requirements were identified and a TMIP Program office was established.

C4.3.1.4. The initial prototype of the MAD was developed and demonstrated at the JWID in 1995 and 1996.

C4.3.1.5. The CHCS II Program requirements were identified and a CHCS II Program Office established.

C4.3.1.6. MAT version 0.5 successfully completed an independent validation and verification. MAT will be incorporated into GCCS at level 5 compliance with the COE.

C4.4. CURRENT STATUS

C4.4.1. The MHS community has taken steps, through the MHS Strategic Plan, to

clearly establish goals and identify strategies to meet those goals. The MHS goals and strategies are focused on the five significant areas of medical readiness, strategic leadership, leader development, benchmark health system, and technology integration. Achieving those goals will ensure that the MHS provides not only a superior readiness capability, but a world-class health delivery system.

C4.4.2. MRSP Action Plans in the C4IM functional area call for the medical community to redouble its effort to develop a standardized, integrated, and seamless system of medical command and control compliant with the JTA, the DII COE, and the C4ISR architecture framework. The TMIP was an outgrowth of that initiative.

C4.4.3. The objective of TMIP is to provide integrated automation of the theater medical environment. TMIP will support all echelons of care by providing a means to move, review, and combine medical data, imaging, and situation reports that serve the theater of operations as well as support CONUS medical sustaining bases. TMIP will provide support by integrating medical capabilities under a joint concept of operation and support the delivery of seamless medical care. The TMIP goal is to provide a global medical information capability linking information databases and integration centers that are accessible to the warfighter, anywhere, anytime, during any mission. TMIP establishes the means and a standard for integrating existing, developing, and future medical information systems (software and equipment) into an interoperable capability that supports Theater Health Services. The TMIP will provide seamless, integrated, automated medical information addressing all functional areas including C^2 (to include planning functions), medical logistics, blood management, patient regulation and evacuation, medical threat and/or intelligence, health-care delivery (including telemedicine), manpower and/or training, and medical capabilities assessment and sustainability analysis.

C4.4.4. Major TMIP activities include the following:

C4.4.4.1. Validated MNS by the ASD(HA), January 29, 1996.

C4.4.4.2. MNS was sent to JROC for coordination, November 18, 1996.

C4.4.4.3. C3I MAISRC approval of Milestone 0, April 16, 1996.

C4.4.4.4. The MOU regarding roles and responsibilities establishing TMIP, October 13, 1996 (reference (h)).

C4.4.4.5. Air Force published an AE telemedicine strategic plan.

C4.4.4.6. The Combatant Commands and the Services have provided medical information requirements to TMIP program manager who is now consolidating them into a capstone requirements document. The TMIP capstone requirements document has been staffed out through the Joint Staff (J8) for approval. Additionally, the TMIP Block 1 ORD has been developed and is out for comments.

C4.4.5. The CHCS II Program Office is responsible for the development and deployment of CHCS II. CHCS II will be a "system of systems" that will provide the functionality of over 60 clinical information systems developed by the Department of Defense. When deployed, CHCS II will provide cost effective, worldwide, standardized clinical applications to support the following:

C4.4.5.1. Health-care delivery to Armed Service personnel, retirees, and beneficiaries.

C4.4.5.2. Medical readiness of military forces.

C4.4.5.3. Quality managed care. A computer-based patient record, an end product of CHCS II, will capture, maintain, and provide comprehensive, relevant, and accurate patient-focused information for health-service delivery at any time and at any location over the beneficiary’s lifetime.

C4.4.6. Major CHCS II Program Office activities include the following:

C4.4.6.1. MNS approved by the ASD(HA), November 14, 1996 (reference (i)).

C4.4.6.2. C3I MAISRC approval of Milestone 0, January 20, 1997 (reference (j))

C4.4.6.3. ORD approved by ASD(HA), April 10, 1997 (reference (k)).

C4.4.6.4. TEMP approved by ASD(HA), May 30, 1997 (reference (l)).

C4.5. OBJECTIVES

C4.5.1. Develop, acquire, deploy, and sustain a joint medical communication infrastructure that supports the entire continuum from operational to peacetime facilities and uses common telecommunications systems such as the DISN to the

maximum extent practical with a robust, multi-tiered, and seamless. Infrastructure must have the necessary communications capabilities to be interoperable with the global communications architecture of the Combatant Commands and the Services.

C4.5.2. Develop a joint medical situational awareness system that supports command and control, medical logistics, and patient in-transit visibility and is linked with GCCS and GCSS.

C4.5.3. Provide a seamless, interoperable medical information system with GCSS that supports contingency operations across all echelons of care and complies with data standards within the SHADE to promote data sharing and data quality.

C5. CHAPTER 5

LOGISTICS

C5.1. INTRODUCTION

C5.1.1. The main function of the medical logistics system is to ensure that the right medical equipment and supplies are available when and where they are needed. It is a complex task requiring the management, review, and coordination of a multitude of functions and programs including: determining clinical requirements; programming the various funds required; executing the procurement actions; fielding equipment in a complete and capable unit; prepositioning those units in a configuration and at a site that will allow the unit to meet its medical mission in the time frame required; sustaining, distributing and modernizing the supplies and equipment issued to DoD medical units; procuring the appropriate levels of non-medical support equipment to ensure that medical units can meet the mobility and communications requirements of their missions; and managing the WR program to ensure sufficient stocks are not only on-hand and prepositioned, but that the dated and deteriorative stocks are managed in the most cost-effective manner.

C5.1.2. The logistics support environment continues to undergo dramatic changes. The force structure has been reduced, and there is increased emphasis on joint warfare and MOOTW. The military has adopted modern business logistics practices to support the peacetime health-care mission. That has resulted in DoD dependence on commercial sources of supply verses traditional military sources. Those changes must be addressed and actions taken to ensure that medical logistics support structures are responsive to the readiness mission. However, business practices such as Prime Vendor, Vendor Managed Inventory and Just-In-Time Logistics are not a substitute for prepositioned materiel in theaters of operation as required by OPLANS and the DPG (reference (d)).

C5.1.3. The IMLG, chartered by the Service SGs, and a variety of organizations are addressing the various medical logistics issues. This MRSP 2004 provides coordination and oversight for the myriad of actions that are ongoing, and coordinates the actions of the Services with the policies and priorities provided in the DPG (reference (d)).

C5.2. BACKGROUND

C5.2.1. Deployment and sustainment support involves providing both medical and non-medical materiel to the operational user level and maintaining those assets through the product and/or program life cycle. All medical materiel supporting the fighting force, especially dated and deteriorative items, must be integrated with support plans to ensure timely deployment of assets and sustainment of theater capability. Additionally, those items not readily available in the commercial market place must be identified and logistically supported to ensure prompt availability.

C5.2.2. The size, duration, and nature of future deployments cannot be determined in advance. Medical logistics support must be flexible and tailorable and must anticipate changes in deployment requirements. Sustainment and modernization of both medical and non-medical assets is critical to supporting deployable forces.

C5.2.3. Maintenance, refurbishment, and reconstitution of assets, whether operational or prepositioned, is of paramount importance. Equipment and supplies must be maintained at levels compatible with unit and assemblage tasking. Acquisition strategies, must be in place to ensure the availability of supplies and repair parts to support deployment timelines. These acquisition strategies do not supplant the need to hold stocks of supplies and repair parts, but minimize the levels that must be held. With the transition from military-unique to COTS material in our operational medical assemblages, readiness can be maintained through innovation acquisition strategies and partnership with industry. These strategies do not supplant a continuing requirement to hold inventories of supplies and repair parts, but offsets some of the requirements as we purchase response vice inventory. The Services will need to develop a balance between these two strategies to ensure that adequate support for deployment timelines is maintained.

C5.2.4. The difficulties in communicating medical logistics data during recent deployments are well documented. While some of the difficulties center on an inability to transmit or receive logistics data, and lack of interoperability between the Services' automated information systems the medical logistics community needs to also have the capability to provide users with timely and accurate information on the location, movement, and status of equipment and supplies. JTAV, which includes in-transit visibility and commercial asset visibility, is necessary for the medical logistics community to succeed. While DMLSS provides a single, integrated medical logistics system; JTAV provides the framework for asset visibility throughout the full spectrum of operations. JTAV provides the capability to see, use, and control the total logistics pipeline by providing the visibility for timely decision-making. DMLSS provides the integrated communications connectivity as well as the interface into

JTAV to provide to provide the medical logisticians with the automation tools for effective health services logistics support.

C5.2.5. Military operations in the post-Cold War era will always be a joint undertaking. Medical logistics support cannot be focused on the needs, priorities or capabilities of any one Service, but must be responsive to the needs of one or more of the Commanders of the Combatant Commands. Joint medical logistics planning involves: identifying materiel and transportation assets to support deployment and sustainment of medical units; determining the appropriate joint medical logistics structure; and assessing medical materiel readiness of medical units and/or platforms and sources of supply.

C5.3. ACCOMPLISHMENTS

C5.3.1. Significant progress was made towards resolution of the Logistics problems that were outlined in the MRSP 2001 (reference (b)). Following are some of the tasks that have been completed.

C5.3.1.1. Medical materiel requirements have been developed for all of the Services.

C5.3.1.2. Successful in establishing some contracts for centralized coordination for the disposal of expired materiel.

C5.3.1.3. Operational units have been incorporated as ordering points in regional prime vendor contracts. During resolicitation of regional contracts, surge requirements are being identified and incorporated into the Statement of Work. This requirement has been accomplished for some of the regions and will be expanded as other contracts come up for resolicitation.

C5.3.1.4. Decentralized Blanket Purchase Agreements for consumable and spare parts have been established.

C5.3.1.5. The Services have developed programmed requirements to refurbish, retrofit, and/or reconstitute non-hospital assemblages on a cyclic basis.

C5.3.1.6. Joint Pub 4-02.1 (reference (m)) was published.

C5.3.1.7. A listing of D-Day critical items was developed and procedures were established to ensure that sustainment planning is based on the D-Day critical

items list.

C5.4. CURRENT STATUS

C5.4.1. The DoD changing peacetime medical logistics practices such as prime vendor support and just-in-time inventories have eroded the capability to support operations from DLA depot inventories. It is critical that new business practices be adopted to support wartime and contingency operations. Those new practices must focus on rapid access to the commercial medical logistics base; however, these acquisition strategies, which emphasize response, will not completely supplant the need to maintain some pre-positioned materiel in theaters of operation as required by OPLANs and the DPG (reference (d)). Replacing inventory with response will minimize the need for pre-positioned inventories and make more effective use of limited funding resources; however, to adequately support the OPLANs a balance between these strategies must be achieved.

C5.4.2. The integration of changing peacetime medical logistics business practices with deployment and contingency support requirements is being addressed through the IMLG. The IMLG consists of the Commanding Officer, Naval Medical Logistics Command; the Commander, U.S. Army Medical Materiel Agency; the Chief, Air Force Medical Logistics Office; the Director, Program Management Logistics 500; and, the Staff Director, Defense Medical Standardization Board. The IMLG is chartered by the Service SGs.

C5.4.3. The adoption of new business practices must be accompanied by new approaches to assessing support capabilities. Capability to support contingencies can no longer be expressed simply by counting Service- and DLA-owned inventories. The capabilities purchased from the private sector need to be quantified and included in the capability assessments. A consolidated medical materiel WR requirement is computed annually by the Services based upon the DPG (reference (d)). That requirement is used to survey the medical industrial base, every other year, as part of ICA to identify production capability and sources that could be utilized to meet wartime needs. "Military-unique" medical items, and those items that are not plentiful in the commercial medical logistics base must be identified and validated. Military and Industry must form a partnership to apply industrial preparedness measures that ensure the availability of critical medical materiel, including NBC defense materiel.

C5.4.4. The Services must jointly ensure that an acquisition and support plan is in place to support deployment and sustainment for wartime, contingencies, and

MOOTW. A critical balance must be struck between the quantities of dated and deteriorative materiel maintained for deploying units and reliance on the industrial base for surge requirements. New acquisition strategies with contingency support provisions potentially minimize DoD investment in dated and deteriorative inventories.

C5.4.5. Medical assemblages (includes DEPMEDS hospitals) along with associated non-medical support items, must be sustained and modernized through the systematic identification of needed upgrades in both equipment and consumable supplies. The Department of Defense must also develop medical capabilities that can be tailored to meet specific missions as they arise. Deployability and mobility must be improved by reducing the weight and cube without degrading combat casualty care capabilities. The components of medical assemblages must be standardized to the maximum extent possible to enhance supportability through interoperability. Deployable equipment with embedded processors must be assessed and appropriate actions taken to ensure Y2K compliance assurance. D-Day items and DEPMEDS standardized items form the basis of item selection for medical assemblages managed by the DMSB and/or the Services.

C5.4.6. Current medical logistics doctrine calls for SIMLM systems to be established in support of operational plans. The SIMLM concept is operational in peacetime in USEUCOM and Korea. To effectively manage SIMLM operations, automated medical logistics support systems need to be interoperable and communications links established to allow the rapid transmission of medical logistics data. However, as we move to the concepts of Focused Logistics, which is the integration of logistics functions to provide the warfighter with reliable, responsive and timely support when and where it's needed, distribution management becomes a critical functional requirement. Under focused logistics concepts, inventory management is replaced with rapid throughput and distribution. Transportation will take the place of large inventories which mandate more efficient and effective distribution management. The role of the SIMLM will migrate to function less of an inventory manager to Class VIII Theater Distribution Manager, interfacing with the Theater Logistics C^2 element on all aspects of Class VIII assets in theater or in-transit. The delineation of this responsibility and the lines of authority need to be identified, integrated into doctrine, and exercised during joint operations.

C5.4.7. DAAS and satellite communications allow limited interoperability between the Services' existing medical logistics systems. Demonstration projects, such as the QSTARS-MS^2, have established processes for using the DAAS mailboxes in conjunction with DAMES or the SALTS communication interfaces to transmit and receive supply requisition files between the Services' medical logistics systems.

DMLSS provides a single integrated medical logistics system to streamline this communication, however, the medical logistics community must continue to work in conjunction with the C4I communities to clearly identify their communication requirements to ensure adequate bandwidth connectivity is provided to support transmission of medical requisition files. Without adequate links into the communications networks, the medical logistics community will not be able to transmit requirements or access the information necessary for decision-making under a focused logistics environment.

C5.4.8. The long-term solution to interoperability includes the development of the DMLSS system which communicates via the DII. The DMLSS will provide a single, integrated medical logistics system for use by all Services in both peacetime and wartime. The DMLSS will be developed to support all operational levels and be capable of interfacing with the line logistics systems. The Services will determine where and how DMLSS will be employed and at what level the interface will be incorporated into their overall logistics processes. The DMLSS will serve as the medical logistics component of TMIP. The responsible office for DMLSS is TMA(IMT&R). A primary senior coordinating body for DMLSS is the MLPS made up of the Service Medical Logistics Chiefs, the Director of the DPSC Medical Directorate, and the Deputy Assistant Secretary of Defense for Health Affairs (Health Operations Policy).

C5.4.9. The nature of future deployments requires joint, combined, and integrated medical logistics planning. That ranges from the development of common processes for determining requirements building the joint medical repository for, JTAV, and assessing medical logistics readiness, to the development of joint doctrine for medical logistics support in an operational theater. The results of joint planning need to be validated through the inclusion of realistic medical logistics play in joint exercises.

C5.4.10. New business practices are changing the methods for transporting medical materiel overseas. Joint medical logistics planning must result in reliable, responsive, and timely support when and where it is needed from the "factory to the foxhole." Commercial carriers now serve as the routine channel for medical resupply transportation. The AE CRAF program continues to represent an untested method for transporting medical materiel into a theater of operations. The use of AMC the aircraft represents another mode of air transportation support, and may be the only channel available during the opening stages of a conflict or contingency. Industrial Preparedness Planning Assessments are the foundation; Depot Stocks and/or Direct Vendor Delivery and the Prime Vendor Delivery and the Prime Vendor Program are the cornerstones; Stock Rotation, Prime Vendor Surge, Vendor Managed Inventory,

Corporate Exigency Contracts, and Commercial Asset Visibility are the critical healthcare industry partnerships.

C5.4.11. The adequacy of joint medical logistics doctrine and the interoperability of medical logistics support systems must be tested through realistic joint exercises. The specific tactics, techniques and procedures for providing medical logistics support in joint operations are published in Joint Pub 4-02.1 (reference (m)).

C5.5. OBJECTIVES

C5.5.1. Integrate multiple independent acquisition and planning initiatives into a single seamless Plan to ensure that Combatant Command requirements are met.

C5.5.2. Ensure that medical assemblages and non-medical material are maintained, refurbished, and modernized in a timely manner to provide quality medical care and capability to support operational requirements.

C5.5.3. Provide jointly interoperable medical logistics information management systems within GCCS and GCSS and communication systems, within the DII that allow the transmission and exchange of logistics data within a theater of operations, and with supporting logistics organizations.

C5.5.4. Create a worldwide, medical logistics system capable of tracking and delivering materiel from the factory to the foxhole to meet stated medical readiness requirements.

C5.5.5. Ensure that the PMI are standard, available, and interoperable between the Services, and are operable aboard evacuation aircraft by developing a system to acquire, certify, track, maintain, and recover PMI.

C6. CHAPTER 6

MEDICAL EVACUATION

C6.1. INTRODUCTION

C6.1.1. Medical evacuation through the continuum of medical care may require any combination of air, ground, or sea resources. To ensure that patients receive continuous, timely, quality care, all personnel involved in the evacuation system must be fully trained; and essential evacuation assets (i.e., personnel, platforms, equipment, and supplies) must be programmed, procured, and sustained.

C6.1.2. Establishing a seamless evacuation system requires changing evacuation doctrine and concepts of operation, modernization and sustainment of platform capabilities, increased interoperability of the PMIs, and improvements in system C^2.

C6.2. BACKGROUND

C6.2.1. Historically, the Services have managed patient evacuation processes with multiple C^2 systems. Evacuation decisions were based on the patient's location and whether the required move was intra-theater, inter-theater, or a combination of the two. ODS lessons learned showed those systems were not interoperable. Extensive procedural changes were required to transition from peacetime to wartime operations.

C6.2.2. Since ODS, efforts have focused on integrating patient movement processes and C^2 systems. Achieving a single, seamless evacuation system requires inter-operability not only between system processes but also between Service doctrines.

C6.2.3. Medical evacuation platforms and equipment must be interoperable, reliable, and sustainable in all environments to include NBC. Platform and equipment modernization has not kept pace with either the combat forces or the changes in defense strategy. The ability to support evacuation scenarios ranging from smaller scale contingencies to major theater war is severely limited.

C6.2.4. The C^2 throughout the evacuation system including visibility of personnel, equipment, and in-transit patients has been a major issue. While C^2 throughout the evacuation system remains a major item of concern, extensive efforts have been made to address that concern and much progress has been made. Accomplishments include the continuing development of the TRAC^{2}ES and

establishment of the GPMRC and the TPMRC in USPACOM, USSOUTHCOM, and USEUCOM.

C6.2.5. The MRSP-2001 (reference (b)) also comprehensively addressed medical evacuation. MOOTW reinforced the concerns addressed in this Plan, especially in large scale NEO and MSCA scenarios.

C6.2.6. Reserve component personnel represent 93 percent of the Air Force's AE manpower. Contingencies requiring protracted AE support such as Operation Restore Hope are demonstrating the need to gain access to the Reserve component prior to a PSRC.

C6.2.7. The USACOM has responsibility for the ICMOP. This plan has been lacking definition of CONUS treatment areas, C^2 structure, CONUS MTF treatment capability, and a strategy for activation of area treatment capability. The Plan should clearly provide for patient transportation from strategic aeromedical evacuation hubs in CONUS as soon as clinically stable to the patients' home of record. For planning purposes, this may be defined as the locale from which the patients' unit originally deployed. AE will work with the hub and spoke concept to facilitate patient distribution. Patient movement includes not only AE but also local vicinity movement (ground or air) to the destination MTF.

C6.3. ACCOMPLISHMENTS

C6.3.1. Although several issues remain unresolved, many medical evacuation tasks have been completed since the MRSP 2001 (reference (b)) was published. Following are some of the completed tasks.

C6.3.1.1. Early deploying medical evacuation requirements were identified by unit type.

C6.3.1.2. Current clinical and operational capability for each mode of patient transportation has been evaluated and documented.

C6.3.1.3. VA and NDMS non-Federal MTF capabilities have been mapped into the military regulating categories for the identification of civilian specialty care locations.

C6.3.1.4. A TPMRC CONOPS has been developed.

C6.3.1.5. Joint Pub 4-02.2 (reference (n)) has been published.

C6.3.1.6. USTRANSCOM has been designated as the DoD Executive Agent for medical evacuation system joint doctrine development.

C6.3.1.7. Methodologies have been developed to identify theater and CONUS evacuation requirements by aircraft type and capability.

C6.3.1.8. Concepts of operations for C-9A use in contingencies were reassessed and revalidated.

C6.3.1.9. Life support equipment and consumables required to support patient evacuation were standardized.

C6.3.1.10. Established a methodology to track patient movement items through the medical evacuation system.

C6.4. CURRENT STATUS

C6.4.1. The warfighters' capability to move rapidly is making the provision of definitive forward medical support more difficult. There is a potential for increased early casualty evacuations to rear area medical facilities; i.e., a shorter evacuation policy, for that definitive care. Capabilities supporting that potential evacuation mission increase have been identified and programmed. Refinement of those capabilities is continuing but is dependent on identification of definitive evacuation requirements.

C6.4.2. While evacuation by air is preferred, ground and sea evacuation may be additional options in future operational scenarios. The capability to conduct sea and/or ground evacuation operations as part of an integrated evacuation system, must be enhanced.

C6.4.3. The focus of planning for CONUS casualty reception and redistribution should be on establishing a patient reception and/or distribution structure that supports patient movement requirements around total Federal MTF capability (i.e., DoD, VA, and NDMS MTFs). It is imperative that CONUS treatment areas and C^2 structure be defined. It is also essential that CONUS MTF treatment capability and a strategy for activation of area treatment capability be developed. The culmination of those actions will support a Plan that accommodates a hub and spoke mechanism to provide the

appropriate level of medical care.

C6.4.4. All Service platforms must include the capability to provide treatment, communication, and accept emerging technologies. Today's Army platforms are not sufficiently capable of supporting the goals of an evacuation system for evacuating the theater, providing real-time patient in-transit visibility, and sustaining combat operations. The AE CRAF must be exercised at least annually to refine procedures of call-up, reconfiguration, and operation.

C6.4.5. The evacuation system uses medical equipment that is not always interoperable with the other Services or with the evacuation platforms on which patients are transported. Medical equipment used in the evacuation system shall have been standardized into a PMI list. PMI-approved for use on AE missions are not always available in deployed contingency medical units and are difficult to recover and return once they have departed with a patient. Additionally, processes and procedures for air worthiness releases need to be developed for items on the PMI list.

C6.4.6. USTRANSCOM has undertaken initiatives to integrate C^2 activities into a single process providing global and theater visibility of available beds, mission status, and in-transit patients. Remaining issues include visibility of intra-theater common user ground, fixed-wing, and rotary-wing missions.

C6.5. OBJECTIVES

C6.5.1. Define patient evacuation requirements that accommodate shorter theater evacuation policies or changes in length of stay by all the Services.

C6.5.2. Develop CONUS casualty reception and distribution plans.

C6.5.3. Develop a seamless capability for medical evacuation that includes rotary-wing, fixed-wing, land, and sea assets.

C6.5.4. Develop joint policy for the movement of contaminated patients.

C6.5.5. Develop and execute a program to produce and/or modernize evacuation platforms.

C7. CHAPTER 7

MANPOWER AND RESERVE

C7.1. INTRODUCTION

The Department of Defense must aggressively recruit, train, and retain the appropriate personnel skill mix to meet the medical needs of U.S. military forces. Systems and procedures to ensure adequate medical personnel are available to provide health-care for the Service member and other beneficiaries must be developed and maintained.

C7.2. BACKGROUND

C7.2.1. Assessments of medical readiness conducted by the Chairman of the Joint Chiefs of Staff, the Department of Defense, and the individual Services indicated a shortage of personnel to support the medical requirements. The 1988 MRSP (reference (a)), Congressional hearings, and numerous other reports documented deficiencies and recommended actions aimed at improving medical personnel readiness. In response to those assessments, recruiting and training programs within the Department of Defense have changed significantly in recent years.

C7.2.2. In recent years, success in recruiting, training, and retaining the medical personnel needed to meet the budgeted active duty end strengths has been increasingly more difficult. In an effort to increase the retention of qualified health-care providers, several modifications were made in the incentive and special pays. The Department of Defense began efforts to improve the management of the Service GME programs in order to increase surgical training billets and decrease other specialty training that is less critical to wartime needs. In addition, in 1991, the Congress, in order to protect medical manpower from arbitrary cuts as the military reduced in size, required the Department of Defense to certify that reductions in medical personnel below the 1989 level were excess to the needs of the Service and would not increase CHAMPUS and/or TRICARE costs for health-care.

C7.2.3. Simultaneously, a variety of programs were implemented in the late 1980s, to reduce shortfalls of Reserve medical personnel. Those actions included personnel incentives such as the Health Professional Loan Repayment, Health Professions Stipend Program for Reserve Service, the Selected Reserve Health Care Professional Bonus Test, and special pays for physicians. Recruiting initiatives included a change in appointment and retention age, constructive Service credit for

civilian experience, an increase in the recruiting force, and a national awareness campaign. Management initiatives such as accelerated appointment, the sponsorship program, and the nurse retention study were taken. Recent data indicates that those actions were insufficient in reducing shortfalls.

C7.2.4. A problem that complicated the skills shortfall during ODS was the inability to quickly verify training, credentialing, licensing, and privileging for individuals and units. There were no real time systems that permitted the skill readiness of the individual or units to be rapidly assessed. A similar shortfall surrounded the medical fitness of the military force. The United States lacked an easy yet accurate way to verify the medical fitness across U.S. military forces, including all of the Reserve components.

C7.2.5. In addition to personnel skill shortfalls, the military preparation of medical personnel was problematic during ODS. Thus, the Army developed a special training curriculum, to be attended prior to activation, for personnel who had not attended an officer orientation course.

C7.3. ACCOMPLISHMENTS

C7.3.1. Several Manpower and/or Personnel problems have been resolved since the MRSP 2001 (reference (b)) was published. Following are some of those accomplishments.

C7.3.1.1. The Services are ensuring that the Health Professionals Loan Repayment Program and the Stipend Program are resourced and structured to meet wartime requirements.

C7.3.1.2. The Services are providing financial incentive programs that meet the recruiting and retention needs.

C7.3.1.3. The CCQAS was fielded.

C7.3.1.4. Basic military training for medical personnel has been defined by all the Services.

C7.4. CURRENT STATUS

The current turbulence surrounding medical force requirements and sizing criteria,

active and/or Reserve mix, and the health professionals skill mix, is impacting the ability to develop strategies to improve the overall status and readiness of the medical force. Force reductions and budgetary constraints have focused attention on the effectiveness of recruiting and retention tools, the scope and size of GME programs and entry level training requirements. Actions to reduce Reserve component medical personnel shortfalls are proving to be insufficient.

C7.5. OBJECTIVES

C7.5.1. Recruit and retain sufficient qualified active and Reserve medical personnel to meet military medical operational requirements by specialty and grade.

C7.5.2. Ensure that a consistent set of medical and dental deployability and personnel criteria is used by all the Services.

C8. CHAPTER 8

TRAINING

C8.1. INTRODUCTION

Although sensitive to the need for medical readiness training prior to ODS, the Department of Defense had not established specific training policies, standards and guidelines. There was also inconsistency in formalized and enforced medical readiness training across the Services. In retrospect, the focus during peacetime emphasized health care delivery and CHAMPUS cost reduction, often at the expense of medical readiness.

C8.2. BACKGROUND

C8.2.1. Post-action findings indicate that the provisions of Goldwater-Nichols Department of Defense Reorganization Act of 1986 (10 U.S.C. 151 et seq. reference (g)), are still not understood across the MHS. Remediation of that shortfall will require DoD Components to take actions consistent with roles and responsibilities defined in the law. The Department of Defense makes policy; Services acquire, organize, staff, train, and equip; Combatant Commands identify requirements and execute operations (to include joint exercises); and the Chairman of the Joint Chiefs of Staff directs planning and coordinates the activities of all the major DoD Components. Service-unique training programs reasonably focus on issues specific to the Service, and do not necessarily address joint or multi-Agency issues. Compliance with the November 1992 Chairman of the Joint Chiefs of Staff Memorandum (reference (o)) to combine activities and reduce training costs should provide an opportunity to educate AC and Reserve component MHS personnel in the concepts and practice of support within joint, combined and multi-Agency operations.

C8.2.2. The MHS provides comprehensive care to active duty personnel and eligible beneficiaries. That has resulted in a peacetime care orientation with an active duty specialty skill mix of personnel and training programs that differ significantly from skills required to support wartime operations and MOOTW needs. That emphasis on maintaining peacetime health care impeded the Services' ability to provide field medical training to those health care personnel.

C8.2.3. Currently, the Service medical training programs are designed to reach the two separate audiences of non-medical and medical personnel. The medical

community provides instruction in first aid and PM concepts to non-medical personnel. In turn, non-medical personnel train their units in basic medical techniques to keep themselves and their fellow Service members physically and mentally fit, and alive if injured.

C8.2.4. Medical personnel, both officer and enlisted, receive training through military and civilian sources in specific clinical skills. They may receive additional training to enhance capability such as leadership development, basic combat skills, and techniques for providing combat casualty care. That training is designed to begin at initial entry into Military Service followed, at periodic intervals, with refresher or more advanced training.

C8.2.5. In August 1991, the ASD(HA) chartered the JMREC, to provide executive-level oversight of joint medical readiness training. Then in 1996 the JMREC was disbanded and the DMRTEC was established in its place.

C8.2.6. In November 1992, the Chairman of the Joint Chiefs of Staff, directed "a thorough review of all technical and operations technical training sequentially, across the combat service support, combat support, and combat operations functional areas" to combine training and reduce costs. The Health-care Committee of the ITRO is assessing medical training programs, and has identified several specialty training skills for in-depth analysis and consolidation.

C8.2.7. Medical exercises were increasing prior to 1989, particularly in Europe. Since 1989, medical involvement in the various exercises held by some of the Combatant Commands has decreased markedly. Exercises are an ideal way to test the validity of concepts, doctrine, and the soundness of the operation plans. The loss of medical play in exercises prevents the testing of some contingency medical systems, which do not operate on a day-to-day basis such as blood transshipment centers, wartime medical regulating, wartime communications, and the activation of the various wartime host nation support agreements with allies.

C8.2.8. Another exercise shortcoming has been the lack of designated Reserve component call-up to backfill CONUS MTFs as active duty personnel deploy, to test the viability of assumptions in the ICMOP.

C8.2.9. Recent MOOTW operations have highlighted the need for Service personnel to be increasingly familiar with operating in the joint multi-Agency environment. Numerous lessons learned have cited problems secondary to a lack of DoD personnel understanding the essential directives and agreements governing the

various MOOTW scenarios. Post-action reports indicate that DoD medical personnel participating in recent exercises and/or real-world disasters were not knowledgeable of the chain of command within a Joint Task Force and/or a Combatant Command.

C8.2.10. Similarly, DoD personnel have often demonstrated a lack of knowledge regarding the ICMOP, FRP, VA and/or DoD CONPLAN, the FEMA and the NDMS. The activation of the NDMS has typically been slow during civil disasters, and has received much unfavorable press. Although there is no single oversight authority for the integration of NDMS at the national level, oversight responsibility within the Department of Defense is held by the ASD(HA).

C8.3. ACCOMPLISHMENTS

C8.3.1. The two most significant training accomplishments since the MRSP 2001 (reference (b)) was published are, as follows:

C8.3.1.1. DoD Instruction 1322.24 (reference (e)) was published. Reference (e) established DoD policy guidance for medical readiness training for the first time.

C8.3.1.2. The JMRTC conducted a needs assessment that identified specialty area training requirements.

C8.3.1.3. The DMRTI was chartered with the Army as the DoD Executive Agent.

C8.3.1.4. The CTSC was chartered.

C8.4. CURRENT STATUS

C8.4.1. There is an ongoing need within both the active and Reserve forces for individuals to practice their operational skills in an environment that simulates contingency situations. Currently each Service conducts field medical training activities. The scope and depth of those activities varies between the Services. In addition, the DMRTI provides the Combat Casualty Care course, which is a tri-Service field training experience, and mobile training programs. The DMRTI courses are undergoing a review for currency and utility. Also, the CTSC is implementing trauma treatment sustainment training at level one trauma centers.

C8.4.2. Medical objectives must be inserted in major exercises with the intent of

generating some medical participation. The Commanders of the Combatant Commands should be proactive in detailing medical objectives and participation in exercises several years out to allow advance planning and resourcing.

C8.4.3. The USACOM and the USTRANSCOM are developing plans that integrate the ICMOP, the FRP, and VA and/or the DoD CONPLAN which may trigger use of the NDMS. Those plans should drive training plans and programs to be exercised by the USACOM and the USTRANSCOM at least annually. The training program should provide an effective mix of Computer Exercise, FTX, simulations, and exercises that highlight C4IM issues for MOOTW. Participation in joint, multi-Agency exercises such as CATASTROPHIC-96, PATRIOT MEDSTAR, and VADEX; etc., should provide the venues for the training program. The USACOM and the USTRANSCOM should validate any training proposed (in that area) and seek centralized funding from multiple sources to execute the program where and when appropriate.

C8.5. OBJECTIVES

C8.5.1. Establish a DoD system to provide and monitor medical readiness training.

C8.5.2. Develop a mechanism to ensure DoD-wide interoperability for unique operational areas.

C8.5.3. Maximize DoD-wide utilization of regional field training sites to enhance interoperability and shared training of medical personnel.

C8.5.4. Maximize opportunities for AC and Reserve component medical interface in Service-specific and Joint and/or Combined exercises.

C9. CHAPTER 9

BLOOD

C9.1. INTRODUCTION

In accordance with DoD Directive 6000.12 (reference (p)) the ASBPO, a joint health Agency, is chartered to monitor implementation of the ASD(HA) blood program policies, and to coordinate the blood programs of the Combatant Commands and the Military Departments.

C9.2. BACKGROUND

C9.2.1. In 1983, the DMSB requested the ASBPO conduct a "zero-based" analysis of military blood program requirements for the next 20 years. A program analysis report entitled MBP 2004 (reference (q)) was published. Significant recommendations of the reference (q) report were the need for blood at the second echelon and the use of frozen blood products.

C9.2.2. In May 1985, the ASD(HA) approved the reference (q) report for implementation. In June 1985, the ASBPO convened a panel of subject matter experts. The panel devised a master plan and milestones for implementing the reference (q) project. The MBP 2004 (reference (q)) implementation master plan involves coordination of all MBP projects and modification of the current system to conform to the reference (q) model. The project coordinator is the Director, ASBPO.

C9.2.3. The concept for blood support is generic by design. Each Combatant Command and/or Military Department shall devise a more detailed plan based on that concept. Blood support is a combination of medical, technical, operational, and logistical systems and must be considered separate from clinical laboratory support. The ASBPO, in conjunction with the DMSB, establishes policies for the use of resuscitation fluids. However, the management and distribution of all resuscitation fluids, including albumin, is a medical logistics function. Blood and blood products are in supply class VIIIB, while all other medical items are in supply class VIIIA.

C9.3. ACCOMPLISHMENTS

C9.3.1. The Blood functional area in the MRSP 2001 (reference (b)) had 52 tasks.

Forty seven of those tasks were completed or are on schedule. Significant accomplishments are, as follows:

C9.3.1.1. FDA compliant quality assurance programs.

C9.3.1.2. Licensed all DoD collection facilities with the FDA.

C9.3.1.3. Updated blood doctrine.

C9.3.1.4. Established field collection capabilities.

C9.3.1.5. Completed frozen blood fielding.

C9.3.1.6. Developed and fielded the DBSS.

C9.3.1.7. Fielded five transportable blood transshipment centers.

C9.3.1.8. Activated a second Armed Services Whole Blood Processing Laboratory at Travis AFB.

C9.4. CURRENT STATUS

The Service blood programs continue to re-engineer in downsizing requiring realignment, consolidation of activities, and closure of some centers. Significant effort will be required to maintain FDA licenses and to meet peacetime blood needs. Above all, the first priority of the blood program is to support medical readiness.

C9.5. OBJECTIVES

C9.5.1. Maintain an ASBP through the Services that provides cost effective and quality blood products to meet all DoD requirements.

C9.5.2. Develop joint blood doctrine to support Combatant Command requirements.

C9.5.3. Develop and maintain peacetime blood operations that support the continuum of operations.

C9.5.4. Continually update wartime blood capabilities based on DPG (reference (d)) and develop programs, doctrine, policies and procedures to ensure implementation.

C9.5.5. Improve safety, efficacy, and availability of blood products to meet all contingencies by supporting, monitoring, and assisting transfusion medicine related research of fibrin tissue adhesives, red cells, platelets, plasma and their substitutes, and incorporate new technologies (e.g., rapid test procedures and automated system for injectable water), as they become available.

C10. CHAPTER 10

MOOTW

C10.1. BACKGROUND

C10.1.1. The MRSP-2001 (reference (b)) was initiated in 1993 as U.S. military planning was shifting emphasis from the global Soviet threat to two nearly simultaneous MRCs, as defined in the DPG (reference (d)) IPSs. The basic Plan addresses requirements identified through strategic planning analysis of the MRCs and lessons learned from ODS.

C10.1.2. With the elimination of the Soviet bloc threat there has been an increasing trend toward utilization of U.S. defense forces for MOOTW. The new-world order has unleashed ideological, ethnic, and religious conflicts that were suppressed during the Cold War era. The resulting conflicts have increased the number of complex humanitarian emergencies from an average of five for each year between 1978 and 1985 to seventeen in 1992. Worldwide refugees numbered 1.3 million in 1963; 18 million in 1993. The 1991 large scale U.S. military Operation PROVIDE COMFORT brought relief to hundreds of thousands of Kurds in northern Iraq and effectively triggered a period in which the U.S. military became increasingly involved in MOOTW to the point that the four largest military deployments for 1994 were all some form of humanitarian assistance.

C10.1.3. In 1995, there was a new MOOTW IPS in the DPG (reference (d)) and the Chairman of the Joint Chiefs of Staff has signed the new Joint Pub 3-07 (reference (r)). This Chapter aligns DoD MHS readiness for MOOTW with contemporary line missions, doctrine, roles, and functions.

C10.2. CURRENT STATUS

C10.2.1. The predominance of issues identified through inputs from subject matter experts and review of post-action lessons learned indicated a need for more clarity in acquisition programming and operations planning for MOOTW. Key planning issues are improved planning coordination with DoD and non-DoD Agencies and/or organizations, clarity of mission statement, transition planning, exit strategies, and MOEs. The timely emergence of new joint doctrine regarding MOOTW, specifically addressing medical missions, roles, and functions, should significantly enhance program and operations planning clarity.

C10.2.2. There is also a need to enhance joint, combined and multi-Agency training in MOOTW across the total force and with non-DoD organizations and Agencies. Post-action lessons learned and subject matter expert inputs frequently addressed problems caused by the lack of knowledge regarding established MOOTW policies, guidance, missions, roles, functions, and procedures.

C10.3. OBJECTIVE

Develop doctrine, a clear mission statement supported by concise objectives, reasonable endpoints, and MOEs for the MHS in MOOTW (Foreign and Domestic).

C11. CHAPTER 11

NBC DEFENSE

C11.1. BD

C11.1.1. Background

C11.1.1.1. The potential use of BW by hostile nations poses a steadily increasing threat to U.S. Forces. That assessment is based on the identification of a growing list of nations either capable of employing such weapons or pursuing BW offensive capabilities. BW weapons are generally regarded as requiring a small overall investment to produce. Furthermore, they can be easily concealed and produced by certain types of industry, i.e., legitimate pharmaceutical, food processing, brewery companies; etc.

C11.1.1.2. Effective joint-Service defense against biological warfare agents requires integrated disease surveillance, development and testing of effective rapid CMs, and rapid medical response to BW attack. The Department of Defense needs a seamless, ongoing, disease surveillance network to detect emerging infections that may indicate the use of BW agents. High priority should be placed on R&D of safe and effective protective gear, vaccines, drugs, and therapeutics to protect forces before exposure or for use in post-exposure treatment. Development of rapid medical diagnostic methods are critical not only for the detection of a BW attack, but also for providing definitive care to exposed personnel. Procurement of medical and non-medical protective measures continues to be the major thrust for BW readiness. Those medical CMs, together with non-medical protective measures, disease surveillance, and environmental-based detection platforms, constitute the integrated systems for BW defense.

C11.1.1.3. The other critical elements for mounting a credible defense against biological weapons include the appropriate doctrine development coupled with the required training, and C4I requirements. Increased emphasis is needed on BWD training at all levels. Doctrine should provide fundamental principles to ensure the rapid and effective medical response following a warning and to maintain the OPTEMPO of military forces. Doctrine should incorporate new technologies and related operational concepts for rapid identification of threat agents as they are fielded. Finally, in the event that warnings and CMs are ineffective, and post-exposure treatment is required for personnel, an effective strategy must be

developed and easily dispersed to address potentially overwhelming numbers of casualties.

C11.1.2. Current Status

C11.1.2.1. Despite DoD steps to improve U.S. Forces readiness to operate in a biological environment, serious weaknesses remain. GAO and other reports have indicated deficiencies in medical and non-medical CMs, training, and evaluation. BW detection capability is also marginal, thus limiting DoD capability for a timely medical response. Without improvement in each of those areas, DoD ability to effectively respond to protect personnel in a BW environment will be seriously compromised.

C11.1.2.2. DoD first line of defense against BW attack is a system that provides effective disease surveillance, environmental detection, and rapid field diagnostic capability. That system is currently inadequate to meet the needs of today's battlefield environment. Existing disease surveillance systems lack timeliness, integration, automation, and the ability to adequately assess background levels of endemic disease, as well as rapid detection of nonendemic or emergency infectious agents. The need to continue the development of environmental detection equipment with improved speed and specificity is critical. Furthermore, field diagnostic capability, while improving, must be made more adaptable to the battlefield.

C11.1.2.3. There is also a pressing need to continue developing, fielding, and using BW CMs. Leaders, both medical and line, require accurate and balanced information on the effectiveness and limitations regarding medical and non-medical CMs, and research in that critical area must be continued. There is a need to increase the general understanding, especially among medical support personnel, about the risks of BW and the indicators and effects of a BW attack. Because of the inherent weaknesses in DoD current BW detection capabilities, effective CMs must be continued. Even in the presence of enhanced BW detection capabilities, effective CMs will continue to be absolutely necessary in order to prevent overwhelming casualties in a BW environment.

C11.1.2.4. BWD training and evaluation also requires significant improvement. Army readiness evaluations show deficiencies in ability to properly don protective masks and in the number of Army physicians receiving BW defense training. A recent GAO audit showed that joint exercises included little BW defense training, despite joint doctrine requiring all joint exercises to incorporate the BWD situations with prolonged operations in a NBC environment. Increased emphasis must be placed at all levels of training and readiness evaluation, especially concerning the

handling of contaminated casualties and the possibility of mass casualties that could overwhelm medical support.

C11.1.2.5. Joint NBC integration was directed by Public Law 103-160 (50 U.S.C. 1522, reference (s)), but inter-Service medical integration and medical and/or non-medical integration is minimal. Only non-voting medical representation exists at the JNBCDMB. No medical office similar to the JSIG exists, and there are no medical staff members at the JSMG, the JSIG, or the JNBCDMB Secretariat. There is a strong need to provide effective medical advocacy outside the medical community, establish a clear BWD proponent within the medical community, and integrate non-medical solutions and approaches with medical solutions.

C11.2. CD

C11.2.1. Background

C11.2.1.1. The world is witnessing an increased concern over the growth of chemical weapons technology development. This is based on an assessment by the U.S. intelligence community that has identified the existence of a growing list of nations currently capable of employing chemical weapons on the battlefield. The United States is greatly concerned about CW due to the emphasis placed on it by "Third World" countries. Documented use of CW has occurred as recently as the Iran-Iraq war. That example may have set a dangerous precedent for future conflicts. The potential for use of chemical weapons extends not only to conflict or war, but also to political blackmail or acts of terrorism.

C11.2.1.2. Effective joint-Service defense against CW agents requires an integrated system of medical and non-medical capabilities, doctrine and training. Medical readiness requires R&D of safe and effective drugs and immunotherapeutics to protect forces before exposure, and for post-exposure treatment. Rapid and specific medical diagnostic methods are also critical in order to provide definitive care for exposed personnel. The Department of Defense has deployable chemical casualty care teams that can provide short notice medical consultation and training, at the request of appropriate authority. Medical resources serve as adjuncts to the environmental-based detection platforms and the non-medical physical protective measures, that in their entirety, constitute the integrated systems for CW defense.

C11.2.1.3. Other critical elements in successful CW defense include training, proper doctrine, leadership and organization. Increased emphasis is needed on CW

medical training at all levels from the individual Service member to echelons above division, wing or fleet of each Service. Capabilities to perform far-forward treatment in an NBC environment require strengthening. The solution requires a mix of training, doctrinal, and materiel enhancements.

C11.2.1.4. Medical decontamination doctrine is different across the Services. The Army and the Navy have not adequately addressed medical decontamination for rear area hospitals such as CSHs and Fleet Hospitals. That is in spite of the fact, according to current threat assessments, enemy use of NBC weapons are likely in rear areas.

C11.2.1.5. Careful consideration should be given to the impact of an NBC environment on advanced technology. For example, in the patient tracking field environment, apparatuses such as telemedicine equipment or electronic patient identification cards that are subject to contamination will require effective NBC decontamination procedures. In addition to decontamination procedures, consideration should be given to protection of electronic devices whose functions can be adversely affected.

C11.2.2. Current Status

C11.2.2.1. Recent considerations to downsize the medical departments make it imperative that the Services improve their general NBC defense readiness to increase effectiveness and efficiency, and to minimize casualties. The military medical departments must also dramatically increase their NBC defense capability through training and preparedness.

C11.2.2.2. The thrust of this Plan is to increase the priority of NBC defense in the MHS. Integration between the medical departments of the Services and priority of NBC within those medical departments is lacking. A new Action Plan for CB defense training was created and changes to existing Actions Plans have been made to enhance CB medical readiness.

C11.3. NUCLEAR DEFENSE

C11.3.1. Background

C11.3.1.1. In the context of this strategic Plan, the term "nuclear" encompasses not only traditional nuclear weapons, but also all radiation (ionizing and non-ionizing) hazards identified in this Chapter.

C11.3.1.2. The threat posed to the United States and its allies by the proliferation of nuclear weapons is real and growing. Although there is no current Intercontinental Ballistic Missile threat against the United States by nations other than Russia and China, the threat from theater ballistic missiles originating from other countries is of growing concern. More than two dozen countries have operational ballistic missiles and more have programs in place to develop them. According to the International Atomic Energy Agency Inspection Team Reports published in April 1992 (reference (t)), Iraq had initiated "a complex, comprehensive nuclear weapons development program" and made "continued attempts to conceal the true extent" of their program in violation of the Non-Proliferation Treaty. Egypt, Israel, and Pakistan are developing and producing missiles, and several Persian Gulf countries have purchased whole systems and production technology from China and North Korea. North Korea has sold extended range missiles to Syria and Iran and has agreed to sell missiles to Libya. As long as nations perceive nuclear weapons as enhancing their security and others are willing to sell the technology, production equipment, and/or finished weapons, proliferation of nuclear weapons and associated threats will continue.

C11.3.1.3. The most likely nuclear weapons scenarios in the post-Cold War era are those involving the deployment of relatively low-yield nuclear devices targeted at either military installations or sensitive political targets. In such scenarios, personnel can expect both immediate exposures to large doses of radiation at the time of detonation and to chronic exposures due to residual radioactive contamination. Because the nuclear weapons inventories of adversaries are expected to be small, it is likely that the number of nuclear weapons deployed will be small and that they may be augmented by the use of larger stockpiles of biological and chemical weapons.

C11.3.1.4. In addition to scenarios involving nuclear weapons, the United States must be prepared to deal with radiation dispersal weapons that consist of large amounts of radioactive materials combined with conventional explosives. Those combined weapons could be used to heavily contaminate large vital areas, exposing large numbers of military or civilian personnel, complicating recovery operations and creating terror in military and civilian populations.

C11.3.1.5. Other scenarios of concern are incidents involving nuclear weapons accidents, damaged nuclear reactors, DU munitions and directed energy devices, and radiation sources from industrial waste sites, hospital therapeutic and diagnostic instruments, and research facilities. Preparedness for those nuclear scenarios support both operational requirements, as well as the national military

strategy of peacetime engagement through nation assistance and humanitarian operations.

C11.3.2. Current Status

C11.3.2.1. Military medical planning has historically focused on palliative treatments for huge number of casualties expected in a massive nuclear exchange between the United States and the former Soviet Union. The assumption always was that effective medical treatment is not possible, given the magnitude of medical complications associated with such injuries. Unfortunately, that doctrine has been carried into current, post-Cold War era medical planning and training without regard for the more likely occurrence of smaller scale nuclear scenarios that would result in a more manageable spectrum of radiation casualties. Nevertheless, current joint military operational doctrine is based on a nuclear threat that includes small yield tactical nuclear weapons and other radiation sources which may pose a threat in the modern-day theater of operations (e.g., radiation dispersal devices, damaged nuclear reactors, DU, and damaged or bombed nuclear waste sites, etc.). Modeling of realistic nuclear scenarios, including scenarios of NW use in civilian, non-conflict areas, combined NW and CW and/or BW attack, and military operations in low-level radiation environments, should aid in the development of more appropriate doctrine, exercises, and training.

C11.3.2.2. Appropriate medical response to a NW attack or other nuclear hazards will require a greater commitment to in-depth joint training of all military health care providers for both Reserve and active component alike. It will also require a deeper appreciation by both medical and non-medical leaders of the adequacy of non-medical and medical CM capabilities in nuclear environments. In addition, non-medical personnel require additional information and training to understand and sort out both real and imagined threats to their own safety, to that of their assigned personnel, and to their equipment of an NW attack and/or operations in a radioactively contaminated environment. Joint exercises with non-medical and medical personnel that fully incorporate realistic nuclear situations are imperative.

C11.3.2.3. A new commitment to medical R&D is required to identify CMs capable of increasing combat capability, increasing survivability, and minimizing the short-term and long-term health problems associated with ionizing radiation alone, or in combination with other insults. That R&D program must include development of improved immunotherapy with more effective immunomodulation agents, performance sustaining compounds, strategies to reduce initial injury as well as cancer and other late effects. It must also improve upon the laboratory analytical capability to

accurately assess radiation injury through biological dosimetry in order to more effectively manage medical triage during mass casualty situations. Investigation of the physiological effects of chronic low dose rate exposure in contaminated areas, and combined exposure to NW and BW and/or CW agents is necessary to predict expected casualties (short- and long-term), anticipated performance decrements, and appropriate medical response. Health risk assessments for low-level NBC and toxic industrial chemical hazards should be performed before troop deployment into an area of operation.

C11.3.2.4. The end of the Cold War has resulted in a gradual erosion of nuclear medical defense expertise. The perceived lack of a nuclear threat has focused attention away from that threat. Achieving and maintaining medical readiness to meet national defense objectives depends on the maintenance of radiation expertise in R&D, the medical community, and the fighting forces.

C11.4. OBJECTIVES

C11.4.1. Ensure joint, integrated planning, development and implementation of practical and effective medical NBC CMs, including diagnostics, prophylactics, therapy, and exposure management, when possible.

C11.4.2. Manage personnel exposed to NBC environments to maximize their ability to recover and sustain military operations and critical functions, to prevent incapacitation and death, and to otherwise mitigate the impact of NBC attack on the operational environment.

C11.4.3. Ensure integrated planning, development, and implementation of a rapid, seamless, and responsive medical and/or environmental surveillance, detection and tracking system using DoD and MHS data architecture and standards.

C11.4.4. Ensure joint and integrated training for NBC defense and medical management of NBC casualties to include rapid assessment, decontamination, and appropriate patient management.

C11.4.5. Ensure development of new doctrine and medical policies, equipment training, and research requirements that are needed to conduct the full range of military operations in all radiation (ionizing and non-ionizing) environments.

C12. CHAPTER 12

R&D

C12.1. INTRODUCTION

Military biomedical R&D sustains and enhances the health and performance of Service members across the expanding spectrum of military operations.

C12.2. BACKGROUND

C12.2.1. Military biomedical R&D provides key capabilities supporting medical readiness as warfighting scenarios and threats to the health and fitness of the U.S. force are changing. Those future joint operational scenarios will have a smaller, lighter, faster, more lethal force utilized in both traditional military deployments and MOOTWs. Threats employed by opposing forces, weapons of mass destruction, endemic diseases, and environmental factors will erode combat strength unless proper CMs are developed and employed. Continual emphasis on biomedical R&D is paramount to the maintenance of a modern military force.

C12.2.2. The Biomedical R&D Program enhances casualty care and management, casualty prevention, and the fielding of a fit and healthy force. That program provides CMs (e.g., drugs and vaccines) to protect against infectious disease and weapons of mass destruction, treatment protocols and medical devices for combat injuries, subject matter experts and biomedical information for advice and consultation. Unlike non-DoD and private sector biomedical R&D investments, which are focused on public health problems of the general population, military biomedical R&D is concerned with preserving combatants' health and optimal mission capabilities despite extraordinary battle and non-battle threats to their well-being. Effective management of biomedical R&D and utilization of its products are especially important in an environment of reduced fiscal and manpower resources.

C12.3. CURRENT STATUS

C12.3.1. The military biomedical R&D program addresses medical readiness and modernization through the Service-managed processes for requirements and acquisition programs. The program includes work in multiple biomedical technology and product areas. Oversight of the Services' R&D efforts is the responsibility of the

DoD ASBREM Committee.

C12.3.2. The ASBREM Committee is co-chaired by the Director, DDR&E and the ASD(HA). ASBREM manages the DoD biomedical R&D program through seven technology sub-area panels (Infectious Disease, Medical Chemical Defense, Medical Biological Defense, Medical Radiological Defense, Combat Casualty Care, Military Dentistry, and Military Operational Medicine). Oversight is accomplished through periodic meetings, and an annual program review.

C12.3.3. This Chapter is designed to discuss issues of concern to the military biomedical R&D community as they relate to readiness. Those issues are organized into two objectives: refinement of the needs integration process and improvements in the execution of the military biomedical R&D program. A fundamental issue is the need to collect, analyze, evaluate and prioritize all biomedical R&D-related military operational needs to allow effective project management and resource planning, programming, and allocation. Another area of concern relates to R&D execution, including coordination of Service efforts, integration of R&D products into the force, and maintenance of technical competencies.

C12.3.4. Coordination of military biomedical R&D efforts among the Services, the DoD Agencies, other Federal Agencies, and the civilian biomedical R&D organizations worldwide is of paramount importance for effective program execution and product integration. A proposed approach for enhancing coordination of military biomedical R&D efforts is consolidation of program management into a single organization. In 1996, the Department of Defense conducted extensive preliminary planning for the establishment of an AFMRDA. This Chapter addresses tasks considered essential for the successful establishment and operation of such an organization.

C12.3.5. Other issues that need to be addressed include the following:

C12.3.5.1. Maintenance of military biomedical scientific and acquisition billets at critical levels to support operational medical readiness.

C12.3.5.2. Improved fielding of R&D information and products to the operational forces.

C12.3.5.3. Improving the biomedical review process for addressing potential health issues associated with new weapons systems.

C12.4. OBJECTIVES

C12.4.1. Establish a capability to collect, review, integrate and prioritize DoD biomedical R&D-related military operational needs in order to deliver a DoD-wide coordinated needs list annually to support intelligent allocation of biomedical R&D resources.

C12.4.2. Ensure that the military biomedical R&D program is coordinated, integrated, and executed to meet the Services, joint, and combined needs to provide operational support to the warfighter.

C13. CHAPTER 13

PM

C13.1. INTRODUCTION

This PM chapter, complies with Joint Vision 2010 (reference (c)) to have a healthy, and fit force and to optimize disease and non-battle injury prevention. It integrates DoD MHS PM and health promotion force readiness efforts with contemporary line missions, doctrine, roles, and functions.

C13.2. BACKGROUND

C13.2.1. Prevention is force protection; it is the underpinning that sustains and enhances the health and fitness of the total force. Optimal health and total fitness are key force multipliers, giving commanders a competitive advantage to effectively conduct contingency operations and win wars.

C13.2.2. Integrated delivery of population-based prevention services builds healthy units in healthy communities, improving both force morale and warfighting capabilities. Epidemiological driven prevention services ensure that the right services are provided at the right time and place in the "operational lifecycle" of the warrior (from accession through retirement), with particular emphasis before, during and after deployment.

C13.2.3. A prevention strategy protects against key health threats that have killed, disabled, or rendered ineffective, forces throughout the history of warfare. Seamless PM services do the following:

C13.2.3.1. Encompass health protection, health promotion, and clinical prevention services.

C13.2.3.2. Address agent threats across the health outcome continuum of sub-clinical disease, ineffectiveness, injury, disease, disability, and premature death.

C13.2.3.3. Use medical intelligence and health surveillance data as bases for their PM CMs against disease and environmental threats, occupational hazards, and NBC warfare agents.

C13.2.4. In military operations short of war, endemic disease, and environmental factors are often the most critical threats to the deployed soldiers. Many infectious diseases are avoidable with adequate immunization and/or chemoprophylaxis, food and water sanitation, vector control, and control of occupational and/or environmental hazards. The proper assessment of the medical threat and effective communication of that assessment to the Commander as well as the early deployment of fully functional PM services are essential to preserve a healthy, fit, and ready force.

C13.3. CURRENT STATUS

C13.3.1. DNBI historically have rendered more warriors ineffective than combat. In most U.S. conflicts, at least three times as many warriors have been rendered ineffective due to preventable problems than to enemy action. Comprehensive and integrated PM services must be established and DoD planning guidance and/or doctrine must address the spectrum of issues essential for effective PM delivery. PM services, including doctrine, vision, mission, resources, and capabilities differ among the Services as well as among coalition forces. Those differences hinder joint medical planning and minimize the effectiveness of PM support of joint and/or combined operations. Key PM planning issues include: a new planning framework for PM; improved PM coordination with DoD and non-DoD Agencies and organizations; early PM assessment of the situation; transition planning; exit strategies; and MOEs.

C13.3.2. Current total force accession standards do not adequately incorporate PM criteria. New standards are needed to ensure that only mentally and physically fit persons are accessed into the Services. Accessing and retaining mentally and physically fit recruits is a force multiplier; less time will be lost due to health-related issues.

C13.3.3. Existing health information systems primarily focus on individual patient care; they do not meet requirements for performing necessary population-based data collection and analysis. There are no standardized, automated procedures to readily collect and monitor the medical and/or dental status of the total force or recruits, during peacetime or contingencies. Additionally, real-time field medical information and/or epidemiological analyses are rarely available for commanders and/or decision makers or included in total force accession/retention standards. The current military education system and professional development does not provide commanders the information necessary to implement and manage effective force

protection measures against the myriad of potential health threats with which their forces may be threatened. Thus, commanders often fail to optimally use PM CMs to meet evolving threats, and rarely emphasize prevention or motivate warriors to employ appropriate PM CMs.

C13.3.4. Tools for measuring effectiveness of PM programs are rarely incorporated into the PM program design. Additionally, there are no consistent inter- or intra-Service efforts to use standardized measurement criteria based on nationally recognized standards and best practices. Without standardized risk and/or benefit and cost and/or benefit procedures or measurable outcome criteria, planners cannot evaluate the feasibility or effectiveness of PM activities.

C13.3.5. Current deployment plans rarely ensure early deployment of adequate PM assets and PM services often lack the necessary resources required to monitor, rapidly identify, and effectively counter endemic disease, environmental, and occupational health threats that can injure, degrade performance, and reduce combat potential. Additionally, equipment and supplies needed to ensure force protection from disease and environmental hazards often do not arrive at field sites in a timely manner. Without protective clothing and other CM supplies, forces may suffer significant degradation in performance capabilities.

C13.3.6. Currently, policy, procedures, and training to ensure safe transportation of potentially infectious patients and hazardous medical samples are inconsistent and inadequate. Infection and/or contamination control measures are essentially the same as those implemented in fixed medical facilities. Joint and integrated training and exercising safe handling of infectious patients and hazardous medical specimens are essential.

C13.3.7. Throughout the total force, there is a general lack of knowledge regarding established PM policies, guidance, missions, roles, functions, and procedures. After-action reports also indicate PM training is not standardized, consistently applied, or timely. Current training programs do not provide an effective mix of Computer Exercises, FTX, simulations, and exercises that highlight C4IM issues for PM. Furthermore, since warriors and their leaders are rarely held accountable for health and fitness, PM activities have not been appropriately emphasized in planning, operations, or training. There is a critical need to improve joint, combined and multi-Agency training in PM across the total force and with non-DoD organizations and Agencies. The importance of PM in MOOTW (disasters and refugees; etc.) must be emphasized.

C13.3.8. PM manpower shortages exist at all levels and in all the Services. PM training and assets vary significantly between and within the Services. Sustainment of PM training presents unique problems to both AC and Reserve component personnel during peacetime, but especially to Reserve component personnel who are not employed in PM in their civilian jobs. The lack of continuity between peacetime and wartime PM needs further complicates PM training for both the AC and Reserve component. Integration of AC and Reserve component PM into medical planning, training, exercises (field and simulation), and deployments is critical to future mission success.

C13.3.9. Finally, once personnel are trained, such personnel must be retained in the force. Retention is problematic for a myriad of reasons, including ill-defined career paths and inadequate educational opportunities for officer and enlisted specialties. All PM staffing requirements must be filled with qualified personnel to ensure that the PM requirements can be met during peacetime or contingency missions.

C13.3.10. OASD(HA) directed the staged implementation of PPIP. The PPIP goal is to transform health care delivery from disease and injury treatment to overall disease and/or injury prevention and health promotion. It will link work-site and community-based health promotion and wellness programs beyond the MTF to include line and community partnerships. The PPIP Plan and new DoD Adult Preventive and Chronic Care Flowsheet have been approved and PPIP will be implemented at model sites in April 1998, with MHS-wide implementation by April 1999.

C13.4. OBJECTIVES

C13.4.1. Develop the capability to continuously assess total force health and fitness to provide military leaders with evidence-based tools for decision making.

C13.4.2. Identify or develop appropriate, standardized MOEs and MOPs for DoD health promotion and disease and/or injury prevention programs.

C13.4.3. Provide comprehensive, accurate, timely medical information and intelligence addressing the full spectrum of anticipated contingencies.

AP1. APPENDIX 1

ACTION PLANS

AP1.1. PLANNING

AP1.1.1. Action Plan 1. State Of The Art Planning Tools.

AP1.1.1.1. Background

AP1.1.1.1.1. Numerous references are required by medical planners. Principal among those are joint doctrinal publications and JTTP publications. Those are routinely drafted by a single Service, reviewed by the Services, the Combatant Commands, and selected Component planners, but rarely lose their single-Service flavor.

AP1.1.1.1.2. There has been a disconnect between planners, planning factor developers, and modelers during the development of medical planning tools. As a result tools and rates have been applied outside their intended parameters.

AP1.1.1.1.3. Down-sizing, reduction in forward deployed force structure, and the accompanying reliance on strategic lift leading up to execution have all demanded greater attention to balancing capabilities against requirements. The Combatant Commands and the Services must rely more heavily upon capability-based planning and modeling to refine requirements against capabilities.

AP1.1.1.2. Discussion

AP1.1.1.2.1. Existing reference materials are not readily accessible to the planner. Technology provides the capability to make planning reference materials available electronically through the Internet.

AP1.1.1.2.2. Developers of planning tools must communicate effectively with all parties of the planning process. Such communication ensures that the specifications are understood by the developers from the beginning, and that the planning factors and models are applied appropriately.

AP1.1.1.2.3. The Combatant Commands and the Services need a joint medical planning tool to give them the capability to do requirement and capability-based planning and programming. Development of that tool is imperative because of the vacuum created by the withdrawal of the MPM.

AP1.1.1.3. Objective. Provide medical planners with the tools they need to develop effective, executable plans.

AP1.1.1.4. Tasks

AP1.1.1.4.1. Create a joint medical planning tool to do requirements and capabilities-based planning. That tool should be approved for planning and programming (RCD: 1/99, PAO: the OASD(HA)(HOP) and the Chairman of the Joint Chiefs of Staff).

AP1.1.1.4.2. Develop a process to continuously refine and maintain the approved joint medical planning tool (RCD: 3/99, PAO: the OASD(HA)(HOP) and the Chairman of the Joint Chiefs of Staff).

AP1.1.1.4.3. Establish a process to ensure communication between users, modelers, and factor developers during development of medical planning tools. (RCD: 7/99, PAO: The Chairman of the Joint Chiefs of Staff).

AP1.1.1.4.4. Define a process to standardize and integrate the development of planning factors to support existing and future planning tools (RCD: 3/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.1.1.4.5. Develop a medical reference Web Site that provides existing medical Joint Pubs, JTTPs, and other reference materials (RCD: 7/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.1.2. Action Plan 2. Career Development Of Medical Planners.

AP1.1.2.1. Background

AP1.1.2.1.1. In April 1984, a Medical Review Group issued its "Report on Medical Readiness Planning in the U.S. European Command" (reference (u)). That report detailed serious deficiencies in medical readiness caused by a lack of resources and planning. The report established the need for qualified medical planners at all echelons of operational planning systems.

AP1.1.2.1.2. Since 1994, progress has been made in the career development of medical planners. All the Services now have established career paths and medical planner billets have been identified and coded. Also, the JMPC has been established.

AP1.1.2.1.3. Courses, conferences, and meetings are available that address various aspects of planning, both medical and non-medical. Those have been underutilized by planners due to lack of publicity, lack of funding, and a poorly recognized need.

AP1.1.2.2. Discussion

AP1.1.2.2.1. Numerous billets have been identified as requiring qualified Medical Planners. However, qualified officers are often not assigned to those billets due to a shortage of properly trained and experienced officers. That has negatively impacted the joint medical planning process. A joint medical planning presence is needed to provide oversight, validation, and inter-Service coordination of the Service medical mobilization plans and theater assets.

AP1.1.2.2.2. Continuing education, refresher training, and "just-in-time" training are all necessary tools to aid the planning process. Such ongoing training is required for planners to ensure familiarity with the most current doctrine, plans, and means to accomplish planning and execution objectives. In addition, attendance at such training by other medical department personnel (unit commanders and physicians; etc.) will enhance overall support of readiness objectives throughout the medical departments.

AP1.1.2.3. Objective. Fill medical planning billets with qualified personnel.

AP1.1.2.4. Tasks

AP1.1.2.4.1. Identify prerequisite training and experience requirements for operational planning billets (RCD: 7/99, PAO: the Chairman of the Joint Chiefs of Staff and the Services).

AP1.1.2.4.2. Establish continuing joint education and refresher training for medical planners, and other medical department personnel (RCD: 1/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.2. REQUIREMENTS, CAPABILITIES, AND ASSESSMENT

AP1.2.1. Action Plan 3. Medical Planning Factors.

AP1.2.1.1. Background

AP1.2.1.1.1. Medical planning models use numerous planning factors and/or tables provided by the Services. Many planning factors have never been revalidated. Existing planning factors and models focus on hospital admissions. That approach ignores other medical requirements not related to hospital admissions. The "Time, Task, Treater" file only provides 3rd and 4th echelon data for developing planning factors for requirements generation.

AP1.2.1.1.2. Currently, planning factors are often misapplied. As a result, medical requirements may be over- or underestimated.

AP1.2.1.2. Discussion. Valid planning factors are necessary to develop medical requirements across the full spectrum of medical care from the point of injury and/or disease occurrence to treatment in a CONUS-based MTF. The absence of those factors will result in a degradation of medical capabilities.

AP1.2.1.3. Objective. Establish planning factors across the continuum of care from the point of occurrence (injury and/or disease) to the CONUS-based MTF.

AP1.2.1.4. Tasks

AP1.2.1.4.1. Develop a comprehensive, Y2K compliant clinical database to support planning and programming (RCD: 1/99, PAO: the DMSB).

AP1.2.1.4.2. Develop standardized planning factors across the continuum of care, to cover the full spectrum of operations including guidelines for application (RCD: 6/99, PAO: the Services).

AP1.2.1.4.3. Develop a process for continual review and validation of the clinical database and all planning factors (RCD: 7/99, PAO: the DMSB).

AP1.2.2. Action Plan 4. Incorporate Medical Participation Into Wargaming Models And Simulations.

AP1.2.2.1. Background. Medical requirements are linked to combat operations, which must compete with the line for resources such as communications, lift, and transportation. Therefore, medical planning factors should be integrated into wargaming models.

AP1.2.2.2. Discussion. The Department of Defense has adopted a strategy of using distributed interactive modeling to establish requirements and to train

personnel. Adding medical participation to wargaming models would allow casualties generated by such exercises to be fed directly into medical requirements generators. That would ensure that the casualty estimates parallel the planned combat operation. At the same time the medical requirement for resources such as lift and communications will be accounted for by the warfighters during their wargame. Also, the effects of DNBI and NBC agents need to be added to the wargaming models thereby creating casualties and interference that do not currently exist in the models. That would provide a more realistic exercise for the warfighters and would make them more aware of the need to coordinate with medical personnel.

AP1.2.2.3. Objective. Add medical requirements to all wargaming activities, and develop interfaces between wargaming tools and existing and/or future medical models.

AP1.2.2.4. Tasks

AP1.2.2.4.1. Develop a process to ensure medical coordination during the development of wargaming models (RCD: 3/99, PAO: the DMSB).

AP1.2.2.4.2. Incorporate realistic medical scenarios into wargaming models (RCD: 9/99, PAO: the Services).

AP1.2.3. Action Plan 5. Patient Condition Data.

AP1.2.3.1. Background

AP1.2.3.1.1. A key component of medical models used to establish requirements is the "Time, Task, Treater" file. That file allows PCs to be linked to the appropriate treatment so that data on patient load can be converted to projections of the medical resources required. It is essential that the set of PCs be comprehensive and that the rate of occurrence of each condition be accurate to achieve valid projections of medical resources.

AP1.2.3.1.2. The development of the Time, Task, Treater file started with the treatment information for a relatively small number of PCs. Over time new categories have been added to cover conditions that require equipment that was not required by the previously defined conditions. That process, however, has resulted in a set of categories that are not connected to the diagnostic codes used in military medical records.

AP1.2.3.2. Discussion. Efforts to link the ICD-9 codes of military

significance with the PC codes have revealed that some diagnoses are not covered by any PC code. In addition, when computing rates it is important to specify the type of patients that are to be considered. Standardized terminology is necessary to accomplish that task.

AP1.2.3.3. Objective. Develop real-world standardized patient load data with modern patient condition codes enabling planners to forecast medical workload and resource requirements.

AP1.2.3.4. Tasks

AP1.2.3.4.1. Add new PC Codes and "task, time, treater," data for ICD-9 codes of military significance (RCD: 1/99, PAO: the DMSB).

AP1.2.3.4.2. Develop standardized definitions for admissions and presentations (RCD: 2/99, PAO: the DMSB).

AP1.3. C4IM

AP1.3.1. Action Plan 6. Communications Interoperability and Integration.

AP1.3.1.1. Background. The ability to communicate in a timely and reliable fashion has always been a source of frustration to medical units. All recent operations and contingencies continue to confirm the need for better medical communications support. Medical communications problems are not just between the Services but also between functional areas within the Services. For example, during ODS AE and regulating information could not be exchanged within the theater or between theaters due in part to lack of communications infrastructure and/or interoperability shortfalls. Similar situations have since occurred in Operation Joint Endeavor in Bosnia.

AP1.3.1.2. Discussion

AP1.3.1.2.1. Communications provides the links to establish an integrated theater health services support continuum. Communications should be seamless, available, reliable, and maintainable.

AP1.3.1.2.2. The Services have not had the quantitative justification for the line to invest in the development, acquisition and sustainment of medical communications capability as defined in paragraph AP1.3.1.2.1. Therefore, a COEA is required to provide that justification.

AP1.3.1.3. Objective. Develop, acquire, deploy, and sustain a joint medical communication infrastructure that supports the entire continuum from operational to peacetime facilities and uses common telecommunications systems such as the DISN to the maximum extent practical with a robust, multi-tiered, and seamless. Infrastructure must have the necessary communications capabilities to be interoperable with the global communications architecture of the Combatant Commands and the Services.

AP1.3.1.4. Tasks:

AP1.3.1.4.1. Gather medical service and Combatant Command telecommunications requirements (e.g. operational requirements, system constraints, interface requirements) to ensure interoperability (RCD: 1/99, PAO: the TMIP PMO).

AP1.3.1.4.2. Validate requirements with joint and Service organizations and coordinate with the DISA and the Chairman of the Joint Chiefs of Staff J-6 (RCD: 1/99, PAO: the TMIP PMO and the Services).

AP1.3.1.4.3. Incorporate Service and joint medical requirements as applicable into the line infrastructure (RCD: 7/99, PAO: the TMIP PMO and the Services).

AP1.3.1.4.4. Develop the global communications architecture and a life-cycle acquisition strategy to integrate into the line community's communication capability that is in compliance with JTA, the DII COE, and the C4ISR Architecture Framework (RCD: 2/99, PAO: the TMIP PMO).

AP1.3.1.4.5. Define and implement training for joint medical communications operations and unit-level communications operations (RCD: 8/99, PAO: the Services).

AP1.3.1.4.6. Establish a process to update Service and Combatant Command medical communications requirements baselines at a minimum of 24 months (RCD: 3/99, PAO: the TMIP PMO).

AP1.3.1.4.7. Establish a process and conduct ongoing COEA of medical communication capabilities to substantiate the operational return on investment during contingency operations (RCD: 3/99, PAO: the TMIP PMO).

AP1.3.2. Action Plan 7. Command and Control - Medical Situational Awareness.

AP1.3.2.1. Background. Currently, there is no automated system available to provide medical situational awareness. Medical planners now have extreme difficulty developing situational awareness data during operations. For example, under current conditions, patients cannot be tracked as they pass through the medical system.

AP1.3.2.2. Discussion. A MAD is under development by the TMIP office. That software tool is designed to provide medical situational awareness; however, the data sources required by the MAD are not sufficiently developed to provide data in a useful manner. Source data systems, either existing or under development, include the TRAC2ES , the PARRTS, the DMLSS, the DBSS, the CHCS, the DMHRS, the JTAV, and the Immunization Tracking System. The Medical Situational Awareness tool should aggregate information such as medical regulating, casualty tracking, medical asset, medical intelligence, medical evacuation; etc., in a secure environment. Also must assure medical community C4IM systems are developed at a minimum of DII COE level 6 upon development with a migration plan to DII COE level 7 or 8 target based on a business case analysis.

AP1.3.2.3. Objective. Develop a joint interoperable medical situational awareness system that supports command and control, medical logistics, and patient in-transit visibility and is linked with GCCS and GCSS.

AP1.3.2.4. Tasks:

AP1.3.2.4.1. Define medical situational awareness functional requirements (RCD: 3/99, PAO: the TMIP PMO).

AP1.3.2.4.2. Perform market survey to evaluate GOTS and COTS alternatives (RCD: 2/99, PAO: the TMIP PMO).

AP1.3.2.4.3. Design and prototype a joint medical situational awareness system based on functional requirements (RCD: 2/99, PAO: the TMIP PMO).

AP1.3.2.4.4. Conduct operational test and evaluation (RCD: 7/99, PAO: the TMIP PMO).

AP1.3.2.4.5. Field system (RCD: 10/2000, PAO: the TMIP PMO and the Services).

AP1.3.2.4.6. Identify and coordinate medical data standardization with SHADE direction (RCD: 10/99, PAO: the TMIP PMO).

AP1.3.3. Action Plan 8. Information Management.

AP1.3.3.1. Background. Information system shortfalls in the medical support functional area have been consistently documented in post-action reports for the past 130 years. Unit, component command, USCENTCOM, GAO, and IG, DoD reports from ODS are the latest confirmation of continued integrated information and communications needs throughout the medical functional area.

AP1.3.3.2. Discussion

AP1.3.3.2.1. An information management system must be fielded that is in compliance with DII COE. To date, considerable requirements definition has been completed toward satisfaction of that requirement. The TMIP initiative seeks a seamless, integrated family of systems (e.g., the DMLSS II, the CHCS II, CEIS) serving beneficiary care and contingency support across the entire operational continuum. The system must have the same user interface and functions throughout the continuum of care to minimize training and optimize performance. The MHS business areas are working in conjunction with TMIP to develop and deploy systems to meet those contingency support requirements. A PIC and a CPR are necessary to enable information flow.

AP1.3.3.2.2. Assessment and tracking of total force health (including accessions) is necessary for military leaders to make evidence based operational and policy decisions about disease and injury prevention or health promotion. Currently, capabilities to relate and manipulate data elements for epidemiological analysis are very limited.

AP1.3.3.3. Objective. Provide a seamless, interoperable medical information system within GCSS that supports contingency operations across all echelons of care and complies with data standards within the SHADE to promote data sharing and data quality.

AP1.3.3.4. Tasks:

AP1.3.3.4.1. Define and adequately resource TMIP information management functional requirements in the FYDP (RCD: 1/99, PAO: the TMIP PMO).

AP1.3.3.4.2. Define the essential subset of the CPR, that is required for medical support of contingency operations (RCD: 1/99, PAO: the TMIP PMO and the TMA(IMT&R)).

AP1.3.3.4.3. Develop a joint security classification guide for medical information to ensure that all the Services comply with information integrity, patient privacy and Geneva Convention implications (RCD: 1/99, PAO: the TMA(IMT&R)).

AP1.3.3.4.4. Field a PIC to provide on demand access to dynamic individual personnel and medical information (RCD: 5/99, PAO: the TMIP PMO and the Services).

AP1.3.3.4.5. Develop a record for use in MOOTW (e.g., track refugees, disaster victims, etc.) compatible with the DHHS and the WHO (RCD: 10/99, PAO: the TMA(IMT&R)).

AP1.4. LOGISTICS

AP1.4.1. Action Plan 9. Deployment and Sustainment.

AP1.4.1.1. Background. Deployment and Sustainment support involves getting both medical and non-medical materiel to the operational user level and maintaining those assets through the product and/or program life cycle. All medical materiel supporting the fighting force, especially dated and deteriorative or short shelf life items, must be integrated with support plans provided to ensure timely deployment of assets and theater capability. In addition, those items that are not readily available in the commercial marketplace must be identified and supported to ensure prompt availability.

AP1.4.1.2. Discussion. The shift from military to commercial sources of support is reshaping medical logistics systems. In that shifting environment, all types of military units - from far-forward surgical teams to wholesale support organizations, are now largely dependent on commercial distributors, information systems, and manufacturers (some of which are not fully developed or integrated) to replace the disappearing military infrastructure. The DPSC is transforming itself from a manager of billions of dollars of DoD inventories into group purchasing organization managing distribution and product pricing contracts. To a lesser extent, the same changes are occurring at the medical logistics Agencies. Even at deployable medical organizations, the impact has been dramatic. Most resupply for consumable medical

items is likely to occur through commercial rather than military sources. New coordinating processes are required to monitor, predict, and, to some extent, regulate the flow of resupply requests from deployed units to their commercial suppliers, and to manage the movement of supplies from the CONUS-based commercial distributors to their overseas customers. Prepositioning will continue to be imperative especially in light of a decline in DoD overseas presence. Prepositioning facilitates the rapid closure of forces, a necessary methodology for future military engagements.

AP1.4.1.3. Objective. Integrate muliple independent acquisition and planning initiatives into a single seamless Plan to ensure that Combatant Command requirements are met.

AP1.4.1.4. Tasks

AP1.4.1.4.1. Develop a Plan to source full basic load and surge requirements for early deploying units, forward deployed units, and any WR requirements prepositioned in the theater (RCD: 10/99, PAO: the IMLG).

AP1.4.1.4.2. Develop a Plan to source the basic load and surge requirements for early deploying forces (RCD: 10/99, PAO: the IMLG).

AP1.4.1.4.3. Develop a Plan to source sustainment for deployed forces (RCD: 10/99, PAO: the DLA).

AP1.4.1.4.4. Integrate IPP process outcomes into medical logistics business practices (RCD: 12/2001, PAO: the IMLG).

AP1.4.1.4.5. Test and evaluate the sourcing plans described in tasks AP1.4.1.4.1, AP1.4.1.4.2, and AP1.4.1.4.3. above (RCD: 10/2000, PAO: the Services and the DLA).

AP1.4.1.4.6. Achieve a minimum of 80 percent NSN and/or commercial numbering cross-reference capability (RCD: 12/2001, PAO: the DLA and the DMSB).

AP1.4.1.4.7. Develop a requisition system to provide automatic substitution for ordered items that is transparent to the ordering activity (RCD: 12/2001, PAO: the DMLSS PMO).

AP1.4.1.4.8. Develop a methodology for disposal of hazardous, outdated, or excess medical materiel while deployed or prior to re-deployment (RCD:

10/2000, PAO: the IMLG).

AP1.4.1.4.9. Develop a Plan to meet the surge and sustainment needs of the Services' requirements with 100 percent availability of materiel for planned and unplanned requirements (RCD: 12/2000, PAO: the Services).

AP1.4.1.4.10. Develop a methodology for prioritization of competing medical materiel demands (RCD: 10/99, PAO: the IMLG and the DLA).

AP1.4.2. Action Plan 10. Equipping, Sustaining, and Modernizing the Force.

AP1.4.2.1. Background

AP1.4.2.1.1. "Equipping, sustaining, and modernizing the Force" means: getting the right medical and non-medical materiel to the operational user level; integrating medical materiel supporting the fighting force with support materiel necessary to conduct routine medical operations (e.g., utility support, messing, quartering, transportation, and personnel support); and sustaining and modernizing all medical and non-medical assets critical to supporting operationally deployed forces.

AP1.4.2.1.2. The size, duration, and nature of future deployments cannot be determined in advance. National security requirements may call for involvement in activities ranging from a major regional conflict such as Desert Storm to small, tailored medical teams operating in remote, very primitive conditions. Any deployment can grow (or shrink) within these upper and lower extremes. Medical logistics support must be flexible and tailorable and must anticipate changes in deployment requirements.

AP1.4.2.2. Discussion. Medical assemblages (includes DEPMEDS hospitals) must be sustained and modernized through the systematic identification of needed upgrades in both equipment and consumable supplies. The Department of Defense must also develop medical capabilities that can be tailored to meet specific missions as they arise. Deployability and mobility must be improved by reducing the weight and cube without degrading combat casualty care capabilities. The components of medical assemblages must be standardized to the maximum extent possible to enhance supportability through interoperability. D-Day items and DEPMEDS standardized items form the basis of item selection for medical assemblages managed by the DMSB and/or the Services.

AP1.4.2.3. Objective. Ensure that medical assemblages and non-medical material are maintained, refurbished, and modernized in a timely manner to provide

quality medical care and capability to support operational requirements.

AP1.4.2.4. Tasks

AP1.4.2.4.1. Develop improved deployable, mobile, modular, tailorable medical capabilities while reducing the weight and cube (RCD: 10/2003, PAO: the Services).

AP1.4.2.4.2. Establish a policy to require continuous assessment of assemblage status and rebuild and/or refurbish every 5 years; modernize as required (RCD: 7/99, PAO: the OASD(HA)(HOP)).

AP1.4.2.4.3. Develop retrograde and reconstitution plans (RCD: 1/99, PAO: the Services).

AP1.4.2.4.4. Jointly develop augmentation sets that can be applied to DEPMEDS and non-hospital medical assemblages to support MOOTW (RCD: 5/99, PAO: the DMSB).

AP1.4.2.4.5. Develop a capability to monitor peacetime medical materiel consumption and use the information to standardize and modernize medical assemblages (RCD: 10/99, PAO: the TMA(IMT&R) and the DMSB.

AP1.4.2.4.6. Integrate the hospital ships and the CRTS platforms into the DEPMEDS standardization process (RCD: 4/99, PAO: the Navy).

AP1.4.2.4.7. Integrate peacetime and wartime standardization processes (RCD: 12/99, PAO: the Services and the DMSB).

AP1.4.3. Action Plan 11. Logistics Support Systems and Communications.

AP1.4.3.1. Background

AP1.4.3.1.1. The difficulties communicating medical logistics data during repeated deployments centered on the following two primary aspects:

AP1.4.3.1.1.1. Inadequate communication links.

AP1.4.3.1.1.2. Lack of interoperability between the Services' medical logistics information management systems.

AP1.4.3.1.2. File compatibility issues prevented effective exchange of

data even when disk to disk transfers were attempted.

AP1.4.3.2. Discussion

AP1.4.3.2.1. Current medical logistics doctrine calls for the establishment of SIMLM systems in support of operational plans. In order to effectively manage SIMLM operations, the automated medical logistics support systems need to be interoperable and communications support available to allow the timely transmission of medical logistics data.

AP1.4.3.2.2. The current shortfall in telecommunications capability is the single most significant medical logistics problem for deployed units. For the medical logistics community to succeed, it must have instant worldwide communications connectivity with supply sources. Access to telecommunications during deployments is much more critical than in peacetime because of extreme time sensitivity and rapid change in medical requirements.

AP1.4.3.2.3. The long-term solution to interoperability includes the development of the DMLSS. The DMLSS will provide a single, integrated medical logistics system for use by all the Services in both peacetime and wartime. The DMLSS will be developed to support all operational levels and be capable of interfacing with the line logistics systems. The Services will determine where and how the DMLSS will be employed and at what level the interface will be incorporated into their overall logistics processes. The DMLSS will serve as the medical logistics Component of the TMIP.

AP1.4.3.2.4. The goal of focused logistics is to provide "precision support", balancing Just-in-Time with Just-in-Case. This balance requires having the capability to adapt rapidly to changing demands on short notice. Responsiveness and flexibility are goals of focused logistics. Information fusion and emerging automated technologies are integral components of focused logistics; bringing to the logistician a synergy of data required to more fully assess the "big picture" (Joint and Combined operations) vice maintaining the current functional Service stovepipes. JTAV is an integral tool for this information fusion. JTAV will provide logisticians the needed visibility of critical resources, both in-transit as well as in inventory (depot and commercial). The Services need to support the development of JTAV by ensuring that functional requirements to support medical logistics are incorporated into the technical design. JTAV provides the information link for the logisticians for decision-making and appropriate response to the operational forces health services logistics requirements.

AP1.4.3.3. Objective. Provide jointly interoperable medical logistics information management systems within GCCS and GCSS and communication systems, with the DII which allow the transmission and exchange of logistics data within a theater of operations and with supporting logistics organizations.

AP1.4.3.4. Tasks

AP1.4.3.4.1. Develop satellite communications and bandwidth requirements for health services logistics support. Coordinate with the respective C4I activities to ensure these requirements are identified and supported in OPLANs and budget submissions (RCD: 10/2001, PAO: the Services).

AP1.4.3.4.2. Incorporate logistics communications procedures in the medical annexes to all current OPLANs and contingency plans (RCD: 10/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.4.3.4.3. Resource, develop, and field DMLSS (a long-term single medical logistics information management support system with world wide and local user communications systems) (RCD: 9/2003, PAO: the TMA(IMT&R)).

AP1.4.3.4.4. Field the DMLSS to deployable medical units (RCD: 9/2003, PAO: the Services).

AP1.4.4. Action Plan 12. Joint Medical Logistics Planning.

AP1.4.4.1. Background

AP1.4.4.1.1. Military operations in the post-Cold War era will always be a joint undertaking. The Army, the Marine Corp, the Navy, and the Air Force units and capabilities all shall be used to make up a joint Power Projection force. Medical logistics support cannot be focused on the needs, priorities, or capabilities of any one Service, but must be responsive to the needs of one or more Commander of a Combatant Command.

AP1.4.4.1.2. Joint medical logistics planning involves the following:

AP1.4.4.1.2.1. Identification of the materiel needed to support deployment and sustainment of medical forces.

AP1.4.4.1.2.2. Identification of the appropriate medical logistics

structure to support joint operations.

AP1.4.4.1.2.3. Assessment the medical materiel readiness of medical units and platforms.

AP1.4.4.2. Discussion

AP1.4.4.2.1. The joint nature of future deployments requires joint and integrated medical logistics planning. That ranges from the development of common processes for determining requirements, JTAV, and assessing medical logistics readiness, to the development of joint doctrine for medical logistics support in an operational theater.

AP1.4.4.2.2. Currently, the Services interpret OPLAN guidance separately and plan and/or execute their respective support to the Combatant Commands. That can lead to less than optimal application of medical materiel resources and use of support systems (i.e., transportation, pre-positioning, and storage sites; etc.).

AP1.4.4.2.3. New business practices are changing the methods for transporting medical materiel overseas. Joint medical logistics planning must result in reliable, responsive, and timely support when and where it is needed from the "factory to the foxhole." Commercial carriers now serve as the routine channel for medical resupply transportation. The AE CRAF program continues to be an untested method as a recurring medical materiel transport into a theater of operations. Strategic airlift will continue to be a vital element of the U.S. military force structure. However, lift requirements during the early stages of a conflict or contingency may exceed available lift. We must look towards ways to more effectively and efficiently expand our use of commercial airlift, such as moving material commercially from the CONUS industrial base into or near the theater of operations. Staging from a communications zone POE can effectively increase available strategic lift by reducing turnaround times (thus increasing frequencies of channel flights). While airlift (commercial and strategic) will be the primary mode of transportation, logisticians need to be more effective in transportation planning to maximize the use of strategic sealift for bulk freight as well as exploring use of the foreign industrial base to support both surge and sustainment medical materiel requirements.

AP1.4.4.2.4. The adequacy of the joint medical logistics doctrine, and the interoperability of medical logistics support systems must be tested through realistic integration of medical logistics into joint-Service exercises.

AP1.4.4.3. Objectives. Create a worldwide, medical logistics system capable of tracking and delivering materiel from the factory to the foxhole to meet stated medical readiness requirements.

AP1.4.4.4. Tasks

AP1.4.4.4.1. Determine joint operational requirements and roles for medical logistics management (RCD: 7/99, PAO: the IMLG).

AP1.4.4.4.2. Develop a detailed Plan to manage the flow of medical materiel (factory to foxhole) during contingency operations (e.g., AE CRAF) (RCD: 10/99, PAO: the IMLG and the USTRANSCOM).

AP1.4.4.4.3. Test the transportation management Plan developed for transporting medical materiel during contingency operations (RCD: 10/2000, PAO: the USTRANSCOM, the Services).

AP1.4.4.4.4. Develop interfaces with distribution and transportation planning and control systems to provide in-transit visibility (RCD: 10/99, PAO: the TRAC^{2}ES PMO).

AP1.4.4.4.5. Analyze OPLANs and prepare joint medical logistics input (RCD: 10/2000, PAO: the Combatant Commands).

AP1.4.4.4.6. Develop plans for including joint medical logistics support in joint exercises (RCD: 7/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.4.4.4.7. Incorporate a standardized list of critical equipment items into the D-Day Significant Item List (RCD: 4/99, PAO: the DMSB).

AP1.4.4.4.8. Develop a process and procedures to standardize medical logistics readiness reporting for all the Services (RCD: 10/99, PAO: the IMLG).

AP1.4.4.4.9. Create a joint system to provide military medical total asset visibility (RCD: 10/99, PAO: the TMIP PMO).

AP1.4.4.4.10. Create a system to provide commercial asset visibility (RCD: 10/2000, PAO: the DLA).

AP1.4.4.4.11. Develop metrics to determine joint operational efficiency

and effectiveness of the medical logistics system (RCD: 10/2002, PAO: the IMLG).

AP1.4.4.4.12. Develop joint procedural guidance for safe transportation of potentially hazardous medical and environmental samples (RCD: 10/99, PAO: the USTRANSCOM).

AP1.4.5. Action Plan 13. Patient Movement Items.

AP1.4.5.1. Background. Equipment accompanying a patient during transport needs to be operable on any evacuation platform and readily accessible by the treatment and evacuation system.

AP1.4.5.2. Discussion

AP1.4.5.2.1. PMIs are not always interoperable with the evacuation platforms on which patients are transported. PMIs that may be used on aircraft must be certified for operation at altitude and for use on designated aircraft (e.g., plugs match outlets, tubing is sized for oxygen ports, PMI and navigational equipment do not interfere with each other).

AP1.4.5.2.2. AMC has responsibility for management of PMI at the strategic level. The individual Services maintain responsibility for PMI management at the tactical level.

AP1.4.5.3. Objective. Ensure that PMI are standard, available, and interoperable between the Services, and are operable aboard evacuation aircraft by developing a system to acquire, certify, track, maintain, and recover PMI.

AP1.4.5.4. Tasks

AP1.4.5.4.1. Provide a process and procedures to obtain air worthiness release of AE equipment (RCD: 1/99, PAO: the DMSB and the Army).

AP1.4.5.4.2. Determine the PMI requirement for echelons 1 and 2 to include: theater pools, maintenance, and retrograde responsibilities, taskings and funding (RCD: 1/99, PAO: the DMSB and the Services).

AP1.4.5.4.3. Provide a process and procedures to integrate the aeromedical equipment certification process between the Services and the Agencies (RCD: 1/99, PAO: the DMSB and the Services).

AP1.4.5.4.4. Develop and deploy a system to track and manage PMIs (RCD: 6/99, PAO: the TRAC2ES PMO).

AP1.4.5.4.5. Develop processes and procedures for PMI management at the tactical level (RCD: 4/99, PAO: the Services).

AP1.5. MEDICAL EVACUATION

AP1.5.1. Action Plan14. Evacuation Requirements.

AP1.5.1.1. Background. The theater evacuation policy is determined by the supported theater commander based on intensity of conflict, availability of medical resources and availability of evacuation assets. As forward medical presence and pre-positioned assets located forward are reduced, medical support for contingency operations becomes more dependent on theater casualty evacuation capability. Additionally, the increased mobility of combat forces makes medical support for fighting forces difficult, which in turn increases the need for early evacuation to rear medical facilities. That factor will increase the number of evacuation missions.

AP1.5.1.2. Discussion. Responsibilities and scope of support provided by the joint medical community must take into account shifting evacuation requirements and potential increases in workload created by planning decisions to limit the theater's medical presence. The joint planners and the Services must plan and program for capability to support a shorter theater evacuation policy or changes in length of stay by planning to use all available patient movement resources.

AP1.5.1.3. Objective. Define patient evacuation requirements that accommodate shorter theater evacuation policies or changes in length of stay by all the Services.

AP1.5.1.4. Tasks

AP1.5.1.4.1. Develop a joint requirements tool incorporating DoD and MHS data architecture and standard tool sets that identifies patient evacuee requirements (quantity and type) by time and location from first responder to CONUS based on a war fight (RCD: 9/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.5.1.4.2. Determine future clinical and operational medical evacuation requirements for each mode of patient transportation (RCD: 9/2000,

PAO: the Services).

AP1.5.1.4.3. Identify clinical and operational shortfalls and develop programs to meet theater medical evacuation requirements (RCD: 3/2001, PAO: the USTRANSCOM and the Services).

AP1.5.2. Action Plan 15. CONUS Aeromedical Evacuation, Patient Reception and Distribution.

AP1.5.2.1. Background. The USACOM has responsibility for the ICMOP. This Plan has been lacking definition of CONUS treatment areas, C^2 structure, CONUS MTF treatment capability, and a strategy for activation of area treatment capability. That plan calls for patients to be received at coastal facilities and transported as soon as clinically stable to the patients' home of record. AE will work with the hub and spoke concept to facilitate patient distribution. Patient movement includes not only AE, but also local vicinity movement (ground or air) to the destination MTF.

AP1.5.2.2. Discussion. The focus should be on establishing a patient reception and/or distribution structure that supports patient movement requirements around total Federal MTF capability. It is imperative that CONUS treatment areas and C^2 structure be defined. It is also essential that CONUS MTF treatment capability and a strategy for activation of area treatment capability be developed. The culmination of those actions will support a Plan that accommodates a hub and spoke mechanism to provide the appropriate level of medical care.

AP1.5.2.3. Objective. Develop CONUS casualty reception and distribution plans.

AP1.5.2.4. Tasks

AP1.5.2.4.1. Identify chain of command for CONUS treatment during wartime and peacetime contingencies (RCD: 1/99, PAO: the USACOM).

AP1.5.2.4.2. Define CONUS treatment areas (RCD: 1/99, PAO: the OASD(HA)(HOP)).

AP1.5.2.4.3. Identify overall CONUS patient treatment capability (RCD: 1/99, PAO: the OASD(HA)(HOP)).

AP1.5.2.4.4. Develop CONUS treatment-specific casualty reception and/or distribution plans, matching requirements to medical capability (RCD: 3/99,

PAO: the USTRANSCOM).

AP1.5.3. Action Plan 16. Integration of Evacuation Modes.

AP1.5.3.1. Background. Patient evacuation is defined as the timely and efficient movement of sick or injured personnel from the site of injury or illness to appropriate MTFs. Patients not returned to duty within the theater evacuation policy are evacuated as rapidly as possible to the next echelon of medical care for further evaluation, treatment and disposition. Current DoD policy is to use air transportation as the preferred means of casualty movement, when available. Surface evacuation systems will be used to transport casualties when AE is not possible or practical. In combined operations, host nation ground and sea ambulances, buses and trains may be used to evacuate U.S. casualties. The Department of Defense needs to explore the evacuation alternatives when air is not available. Joint patient movement capabilities must be integrated to provide timely, safe, and efficient transport.

AP1.5.3.2. Discussion. HSS units must possess the capability to integrate into a theater-wide medical evacuation system to support patient movement requirements by all available means. Alternatives to patient transportation by air must be quantified by each Service. While air appears the logical method for strategic transportation, all transportation modes must be investigated for forward, intra-theater and CONUS distribution patient transportation requirements.

AP1.5.3.3. Objective. Develop a seamless capability for medical evacuation that includes rotary-wing, fixed-wing, land, and sea assets.

AP1.5.3.4. Tasks

AP1.5.3.4.1. Explore and identify alternative strategies to integrate ground, sea, and air evacuation capabilities (RCD: 3/99, PAO: the USTRANSCOM).

AP1.5.3.4.2. Develop a Plan to test the integrated evacuation strategies (RCD: 9/99, PAO: the USTRANSCOM).

AP1.5.3.4.3. Develop an exercise schedule to test joint medical evacuation doctrine to identify interoperability problems and other issues not solved by the joint doctrine (RCD: 1/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.5.4. Action Plan 17. Evacuation of NBC Contaminated Patients.

AP1.5.4.1. Background. Currently, contaminated patients generally are

considered unacceptable for AE because of the potential for contaminating the evacuation aircraft. However, there are situations where patients cannot be fully decontaminated before evacuation. For example, patients who have been exposed to radiation can be externally decontaminated, but will remain contaminated because internal radiation can not be eliminated. Also, patients who are ill with infectious diseases may need to be evacuated, but cannot be "decontaminated" prior to evacuation.

AP1.5.4.2. Discussion. Current medical evacuation doctrine assumes all patients will be decontaminated before they are transported to limit the number of evacuation assets that will become contaminated (Joint Pub 3-11 reference (v))). Air Force procedures generally do not allow for transport on fixed-wing aircraft of radiologically, biologically, or chemically contaminated patients. However, some biologically contaminated patients are evacuated on a case-by-case basis. Procedures must be developed for evacuating contaminated casualties.

AP1.5.4.3. Objective. Develop joint policy for the movement of contaminated patients.

AP1.5.4.4. Tasks

AP1.5.4.4.1. Develop joint policy guidance to ensure safe movement of contaminated patients (RCD: 4/99, PAO: the USTRANSCOM).

AP1.5.4.4.2. Approve new joint policy on the safe movement of contaminated patients (RCD: 1/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.5.4.4.3. Develop implementation Plans including training protocols ensuring safe transport of contaminated patients (RCD: 6/99, PAO: the Services).

AP1.5.5. Action Plan 18. Platform Capability and Modernization.

AP1.5.5.1. Background

AP1.5.5.1.1. Platforms used in medical evacuation (i.e., land, air, and sea platforms) must be interoperable, reliable, and sustainable. Modernization of ground, air, and sea systems has not kept pace with the Combatant Command forces or with the shift of the National Military Strategy to the post-Cold War era.

AP1.5.5.1.2. The ability to adequately support and sustain joint or combined forces is constrained by lack of sufficient and capable interoperable platforms which can keep pace with the operational tempo of the Commanders of the

Combatant Commands executing the emerging Service doctrines.

AP1.5.5.2. Discussion. All Service platforms must include the capability to provide treatment, promote communication, and accept emerging technologies. Today's Army platforms are not sufficiently capable of supporting the goals of an evacuation system for evacuating the theater, providing real-time patient in-transit visibility, and sustaining combat operations. The AE CRAF must be exercised at least annually to refine procedures of call-up, reconfiguration, and operation.

AP1.5.5.3. Objective. Develop and execute a program to produce and/or modernize evacuation platforms.

AP1.5.5.4. Tasks

AP1.5.5.4.1. Modernize Army ground and AE assets by force package, and in concert with the Department of the Army Master Priority List (RCD: 9/2002, PAO: the Army).

AP1.5.5.4.2. Study use of maritime assets that could potentially be used as sea evacuation platforms (RCD: 7/99, PAO: the USTRANSCOM).

AP1.5.5.4.3. Develop plans and procedures to move Army and Marine patients from Echelon 2 to Echelon 3 facilities using Air Force C-130s when distances exceed rotary-wing capabilities (RCD: 1/99, PAO: the Army and the Air Force).

AP1.5.5.4.4. Develop plans to exercise and refine procedures for AE CRAF operations (RCD: 1/99, PAO: the USTRANSCOM).

AP1.6. MANPOWER AND PERSONNEL

AP1.6.1. Action Plan 19. Recruiting and Retention.

AP1.6.1.1. Background. In the past, the wartime requirements for medical personnel, especially health care professionals, have been beyond the capabilities of the Services to obtain. That allowed the medical departments to recruit and retain any and all medical specialties. With the collapse of the Soviet Union, the wartime requirements for medical personnel are now excess to current inventory. That collapse, coupled with reductions in force structure and personnel, requires the Services to match inventory with requirements. As the Services reduce in size, the recruitment and retention of qualified medical personnel, by specialty and experience

is critical. Recruiting and retaining operational specialties, is essential for all components (identify sub-specialty requirements over and above peacetime workload as IMA requirements). Statutory and geographic constraints for the Reserve components must also be considered.

AP1.6.1.2. Discussion

AP1.6.1.2.1. It is now necessary for the Services to accurately match inventory with wartime requirements by duty specialty and grade. Several tools, such as specialty pay, recruiting bonuses, and scholarships, are currently available to assist in this task. Those tools must be tailored and expanded to sustain the force. In addition, due to the demographic distribution of providers, the Reserve component is sometimes unable to obtain needed personnel for existing vacancies in a given location. That is true even though qualified personnel in other geographic locations are obligated or willing to serve.

AP1.6.1.2.2. Current total force accession and retention standards need to be reviewed and updated. PM input into those standards is vital to ensure that DoD health and fitness objectives are defined in suitability criteria. Accessing and retaining healthy and fit individuals is a force multiplier.

AP1.6.1.3. Objective. Recruit and retain sufficient qualified active and Reserve medical personnel to meet military medical operational requirements by specialty and grade.

AP1.6.1.4. Tasks

AP1.6.1.4.1. Develop a Plan to utilize IMAs to fill subspecialties not justified by peacetime workload (RCD: 1/99, PAO: the Services).

AP1.6.1.4.2. Develop a Plan to assign statutorily and/or contractually obligated personnel to unit vacancies, regardless of geographic boundaries (RCD: 1/99, PAO: the Services).

AP1.6.1.4.3. Develop a Plan to fund and identify Reserve component turn-over and training tail to ensure that on execution UTC deployment is 100 percent (RCD: 1/99, PAO: the Services).

AP1.6.1.4.4. Develop Plan to review and update officer and enlisted incentive programs that meet the recruiting and retention needs of the Services (RCD: 1/99, PAO: the Services).

AP1.6.1.4.5. Review and update accession standards to ensure that PM criteria are included (RCD: 6/99, PAO: the OASD(HA)(C&PP).

AP1.6.2. Action Plan 20. Development of Standard Processes to Monitor and Ensure Deployability of Medical Personnel.

AP1.6.2.1. Background. Deployability requires a unique combination of medical and personnel qualifications to be identified, verified and clinically supported prior to deployment. The GAO, the IG, DoD, and the Services' studies concerning problems with deployability continue to surface distinct disconnects in capabilities versus requirements. These reports determined significant numbers of personnel were not physically qualified. Medical readiness support requirements for all the Services and/or the DoD Components, including periodic physical and/or dental examinations, immunizations, optical examinations and appliances, were not consistently met prior to deployment, further degrading medical readiness capabilities. Those reports highlight shortcomings in the ability to verify clinical capabilities and specialty qualifications of both officer and enlisted health care providers. That hampers the ability to align providers with appropriate billets.

AP1.6.2.2. Discussion

AP1.6.2.2.1. Significant numbers of personnel are not medically cleared for mobilization or deployment. Medical and/or dental readiness support requirements for all the Services and/or the DoD Components include periodic physical and dental examinations, immunizations, HIV screening, and optical exams and/or appliances. No consistent system exists within or across the Services and/or the DoD Components to provide those services during peacetime.

AP1.6.2.2.2. Automated personnel data system information was incomplete or out of date and resulted in unnecessary delays and inappropriate substitutions for individual medical personnel and units selected for deployment. Personnel were identified as non-deployable for numerous reasons: medical specialty mismatches, and unacceptable medical and/or physical conditions.

AP1.6.2.2.3. The ability of all medical units to mobilize, deploy and achieve mission accomplishment is dependent upon having immediately identifiable, clinically qualified, and deployment-ready health-care personnel available for assignment to appropriate billets. Active duty practitioners are normally assigned to MTFs which verify their credentials and privilege them to practice a given scope of

medicine. Those privileges are carried over to their unit or platform of assignment upon deployment (requiring only a nominal review and re-privileging as appropriate).

AP1.6.2.2.4. Reserve component practitioners often are "qualified" (credentialed) on paper in a wartime specialty, but practice in a sub-specialty of narrower scope, thereby limiting their utility in the wartime specialty.

AP1.6.2.2.5. Cross-Service and cross-Component verification of capabilities is difficult at best, since there is no standard criteria or management system in place. It is imperative that a single set of substitution guidelines for all the Services and the DoD Components shall be adopted and applied.

AP1.6.2.3. Objective. Ensure that a consistent set of medical and dental deployability and personnel criteria is used by all the Services.

AP1.6.2.4. Tasks

AP1.6.2.4.1. Develop a standardized set of joint minimum criteria for medical and dental fitness for deployability (RCD: 1/99, PAO: the OASD(HA)(C&PP)).

AP1.6.2.4.2. Develop a process to ensure that minimum medical and dental fitness standards are applied consistently across all the Services (RCD: 1/99, PAO: the Services).

AP1.6.2.4.3. Develop a standardized, automated, readily accessible medical/dental status report using stardard DoD and MHS data architecture for the total force, active and reserve, to include immunizations, medical and/or physical profiles, medications, fitness status, dental status, G6PD status, DNA status, eyeglass insert status; etc. (RCD: 12/2000, PAO: the Information Technology Business Areas).

AP1.6.2.4.4. Develop a monitoring system to ensure that AC and Reserve component specialty skills match billet requirements within all the Services and the DoD Components (RCD: 3/99, PAO: the Services).

AP1.7. TRAINING

AP1.7.1. Action Plan 22. DoD Medical Readiness Training System.

AP1.7.1.1. Background. Shortfalls exist in medical readiness training in the Active and Reserve medical forces across the Services. Deficiencies include the lack of required initial entry training; absence of weapons qualifications, survival skills, equipment training, and PM training for medical personnel. Sustainment training has been identified as a critical problem for all personnel. In addition, there is limited availability of formal joint training opportunities for medical personnel.

AP1.7.1.2. Discussion

AP1.7.1.2.1. Military medical training encompasses a broad spectrum of needs. Medical readiness training requirements must be based on the needs generated by the supported commander's operational plans. Those training needs include individual clinical skills in a specific area, applying those skills in an operational setting, basic combat skills and leadership skills.

AP1.7.1.2.2. Medical readiness training includes individual, platform and/or unit specific, sustainment and/or continuing, and leadership training. Individual skill training focuses on those techniques needed to apply clinical skills in a operational setting. Platform and/or unit specific skills are those collective skills that relate directly to the specific unit or platform to which the individual is assigned. Sustainment and/or continuing training refers to the training required to maintain or enhance the proficiency of the individual's skills. Leadership training is the training necessary to develop proficient and capable medical leaders. Those training programs must be linked in a comprehensive training system to ensure medical capability when needed.

AP1.7.1.2.3. Recent operations have highlighted the need for all the Service personnel to be increasingly familiar with medical aspects of readiness when operating in the joint and/or combined and/or multi-Agency environment. After-action reports address numerous lessons learned citing problems related to inadequate understanding of medical intelligence, PM techniques, PM CMs, and risk communication during military operations.

AP1.7.1.3. Objective. Establish a DoD system to provide and monitor medical readiness training.

AP1.7.1.4. Tasks

AP1.7.1.4.1. Rewrite DoD Instruction 1322.24 (reference (e)) to clarify terms and define joint- and Service-specific training categories (RCD: 6/99, PAO:

the OASD(HA)(HOP)).

AP1.7.1.4.2. Develop a standard method (e.g. DMHRS) using the DoD and MHS data architecture standards to document training completion by individual and by operational platform and/or unit (RCD: 9/99, PAO: the TMA(IMT&R) and the HSRS PMO).

AP1.7.1.4.3. Implement minimum joint medical readiness training requirements as determined by the Joint Medical Readiness Training Needs Analysis Working Group (RCD: 1/99, PAO: the Services).

AP1.7.1.4.4. Establish a Joint PM training review group that reports to the DMRTEC (RCD: 1/99, PAO: the DMRTEC).

AP1.7.1.4.5. Identify commonalities in medical readiness training activities between the Services for achieving efficiencies (RCD: 3/99, PAO: the DMRTI).

AP1.7.1.4.6. Develop a Plan to ensure adequate training of the MCS contract network providers that will provide the supplemental manpower needed to support the CONUS-based hospitals during extended medical contingencies (RCD: 12/99, PAO: the TMA(MHSO)).

AP1.7.2. Action Plan 23. Joint Operational Training.

AP1.7.2.1. Background. ODS and recent contingency operations have highlighted an increasing need for Service personnel to rapidly adapt to a joint and combined environment. The National Military Strategy builds on interoperability to meet future missions to include not only combined and joint operations, but also peacekeeping and humanitarian missions.

AP1.7.2.2. Discussion

AP1.7.2.2.1. Increased demand for interoperability creates new training needs within the medical system. Skilled leadership capable of integrating and synchronizing the combat health service support system in support of Combatant Command defined requirements will be critical to successful joint operations. Shortfalls in joint operational training areas as well as the requirement to support peacekeeping and humanitarian missions have created new training demands.

AP1.7.2.2.2. The potential for an increased number of military medical

missions throughout the world suggests a need for medical personnel with regional expertise. Those experts must be oriented by region to the language, culture, social norms, politics, and Host Nation medical capabilities.

AP1.7.2.2.3. Additionally, changing military missions require medical and line commanders to work in a joint and/or combined environment and have a strong understanding of medical intelligence, PM techniques, PM CMs, and risk communication techniques.

AP1.7.2.2.4. During joint operations, the SIMLM system will be the primary method of conducting theater resupply across all the Services. The introduction of a common medical logistics information management system will emphasize the need for a common baseline for medical logistics training within the Department of Defense. The medical logistics training strategy must include regular familiarization with the items on the DEPMEDS D-Day List, since they will be the standard in wartime, but are not necessarily used throughout the peacetime health-care delivery system.

AP1.7.2.2.5. In response to the increased need for interoperability, the medical community requires trained personnel to integrate communications planning with operations planning. The combat health service support system requires experienced information management specialists to participate in design, management and execution of the C4IM architecture at all medical levels, operational and functional.

AP1.7.2.3. Objective. Develop a mechanism to ensure DoD-wide interoperability for unique operational areas.

AP1.7.2.4. Task. Develop a Plan to conduct joint training in the following areas: leadership, regional expert training, communication, logistics, medical evacuation, medical planning, NBC, PM, medical intelligence, and telemedicine utilization and equipment maintenance (RCD: 3/99, PAO: the DMRTI).

AP1.7.3. Action Plan 24. Utilization of Regional Field Training Sites.

AP1.7.3.1. Background. Currently there are 12 medical training sites for conducting field medical training (seven-Army, one-Navy, two-Air Force, two-Marine). There are tentative plans to close approximately three of those sites. The Services usually provide Service-specific training at those sites.

AP1.7.3.2. Discussion

AP1.7.3.2.1. The field medical training sites provide opportunities for enhanced field training with a joint medical operations focus. Frequently, all personnel assigned to a medical unit do not participate in the training conducted at these sites. Rarely, does the training experience include the other Services. Therefore, collective and joint training opportunities are not maximized.

AP1.7.3.2.2. In order to maximize resources the Plan to close Army regional training sites must be revisited before further action is taken.

AP1.7.3.3. Objective. Maximize DoD-wide utilization of regional field training sites to enhance interoperability and shared training of medical personnel.

AP1.7.3.4. Tasks

AP1.7.3.4.1. Revisit the planned closure of three Army RTS-MED in light of the tri-Service training requirement (RCD: 2/99, PAO: the Army).

AP1.7.3.4.2. Develop a joint medical readiness training curriculum for use at regional field training sites (RCD: 6/99, PAO: the DMRTI).

AP1.7.3.4.3. Establish a tri-Service scheduling process to facilitate maximum utilization of the sites and to increase joint training experiences (RCD: 3/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.7.3.4.4. Provide core cadre of medical training and support personnel at each regional field training site (RCD: 10/2000, PAO: the Services).

AP1.7.3.4.5. Obtain and maintain DEPMEDS equipment training sets at each regional training site (RCD: 10/2000, PAO: the Services).

AP1.7.4. Action Plan 25. Training Exercises.

AP1.7.4.1. Background. Exercises are conducted in both the Service and joint arenas. Services conduct medical-specific exercises and occasionally include medical activities in non-medical exercises. Since 1989, medical involvement in the various exercises held by the Combatant Commands has decreased markedly. Historically, few exercises test the entire medical process from initial deployment and Reserve component backfill to theater casualty treatment, with return to duty or transport to the CONUS. The failure to include all levels of the medical system has limited the ability to assess the capability of the combat health service support system.

AP1.7.4.2. Discussion

AP1.7.4.2.1. Exercises are an ideal way to test the validity of concepts, doctrine, the capabilities of individuals and units and/or platforms and the soundness of OPLANs. The failure to include medical activities in exercises prevents the operational testing of the combat health service support system and its impact on force capability. The current medical exercise planning and coordination process does not adequately address or provide medical units with an opportunity to train-as-we-fight. Each Service may exercise individual medical elements but a void has developed in intra- and inter-Service training opportunities. Medical units must train with non-medical units and units from the different Services if they are to be expected to be prepared for their wartime and/or contingency roles.

AP1.7.4.2.2. CONUS and OCONUS training opportunities exist, however the medical system has not been afforded the opportunity to maximize participation. Comprehensive and coordinated CONUS and OCONUS medical exercises must be conducted on a regular basis to provide the opportunities for both active and Reserve medical personnel to train with their wartime unit and, in joint exercises, to interact with the other Service health-care personnel within the DoD medical community. In addition, it would test wartime specific systems to include the TBTCs, the SIMLM systems, the TRAC^{2}ES, medical regulating, communications, the PMIs and medical evacuation. True-to-life medical activities and their impact on force capability must be added to wargaming simulation programs.

AP1.7.4.3. Objective. Maximize opportunities for Active and Reserve component medical interface in Service-specific and joint and/or combined exercises.

AP1.7.4.4. Tasks

AP1.7.4.4.1. Plan, program, and implement the support of, as a minimum, one major Chairman of the Joint Chiefs of Staff- or a Combatant Command-sponsored exercise annually. That will include the deployment of one hospital unit and/or element from each Military Department and the use of the AC and Reserve complement to evaluate deployment, beneficiary health-care continuance, casualty expansion and casualty evacuation (RCD: 1/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.7.4.4.2. Incorporate joint medical focused field play in exercises conducted at the combat training centers (RCD: 3/99, PAO: the Services).

AP1.7.4.4.3. Develop plans to conduct joint-, combined-, and multi-Agency MOOTW exercise programs; i.e., field and simulation (RCD: 3/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.7.4.4.4. Develop a Plan to exercise the VA and DoD CONPLAN, the ICMOP, the FRP and the NDMS (RCD: 3/99, PAO: the USACOM).

AP1.8. BLOOD

AP1.8.1. Action Plan 26. ASBP.

AP1.8.1.1. Background. The blood banking industry is regulated by the FDA and must meet stringent manufacturing and quality assurance requirements. The Department of Defense maintains FDA licenses among the three Services to have blood products available within hours of conflict to support MTFs worldwide. It is essential that the Department of Defense maintain a well coordinated and standardized blood program, even under DoD downsizing, that is in step with new DoD health care initiatives. Emphasis to date includes a standardized quality assurance program, a standardized blood program computer system, and consolidation, privatization, and reimbursement efforts as a result of downsizing.

AP1.8.1.2. Discussion. The 1992 ASBP Update Conference Panel concurred that a centralized blood program management system must exist to ensure effective use of blood resources and to meet FDA requirements. The system must be capable of providing all the required blood support the Services from collection to transfusion. The ASBP has moved into a FDA-compliant environment that emphasizes cGMP and continuous quality improvement. Standardization efforts have focused on SOP development, training, and a comprehensive blood banking computer system. Emerging technologies enhancing blood safety, efficacy, availability, and medical readiness need to be integrated into blood banking practices. Key elements of that program are a standardized computer system, standardized procedures, and joint planning and/or resource management practices. A significant challenge to increased efficiency is the lack of a inter- and intra-Service reimbursement process for blood product services.

AP1.8.1.3. Objective. Maintain an ASBP through the Services, which provides cost effective and quality blood products to meet all DoD requirements.

AP1.8.1.4. Tasks

AP1.8.1.4.1. Implement standardized key manufacturing practices to meet FDA quality assurance guidelines (RCD: 9/2000, PAO: the Services).

AP1.8.1.4.2. Complete modernization development, deployment and movement of a Y2K compliance assured DBSS to Windows NT environment or latest technology (RCD: 3/99, PAO: the TMA(IMT&R) and the CHCS II PMO).

AP1.8.1.4.3. Determine best reimbursement method(s) inter- and intra-Service to support readiness missions for blood collection, manufacturing, and testing (RCD: 5/99, PAO: the OASD(HA)(HB&FP)).

AP1.8.1.4.4. Determine the feasibility of establishing joint consolidated blood centers for the most efficient manufacturing, testing, and operations within the blood community (RCD: 2/99, PAO: the ASBPO).

AP1.8.1.4.5. Develop and deploy global donor deferral and look back in DBSS (RCD: 9/99, PAO: the TMA(IMT&R) and the CHCS II PMO).

AP1.8.1.4.6. Develop a standardized medical education and consultation program to familiarize health care providers with wartime transfusion practices (RCD: 1/2001, PAO: the ASBPO).

AP1.8.1.4.7. Establish guidelines for privatization of blood manufacturing, testing, and operations without compromising the readiness mission (RCD: 4/99, PAO: the ASBPO).

AP1.8.1.4.8. Assess the possibility of maximizing plasma recovery from individual whole blood collection to support the solvent detergent contract (RCD: 4/99, PAO: the ASBPO).

AP1.8.1.4.9. If feasible, maximize plasma recovery (RCD: 4/99, PAO: the Services).

AP1.8.1.4.10. If feasible, establish joint consolidated blood centers (RCD: 10/2000, PAO: the Services).

AP1.8.1.4.11. Develop and deploy laboratory system interface for the DBSS (RCD: 3/99, PAO: the TMA(IMT&R)and the CHCS II PMO).

AP1.8.1.4.12. Develop and deploy electronic storage of blood data in

the DBSS (RCD: 9/2000, PAO: the TMA(IMT&R) and the CHCS II PMO).

AP1.8.1.4.13. Obtain and deploy automated blood product labeling system for the DBSS (RCD: 3/99, PAO: the TMA(IMT&R) and the CHCS II PMO).

AP1.8.2. Action Plan 27. Joint Blood Doctrine.

AP1.8.2.1. Background. Many aspects of blood banking have changed in the last few years and there have been many changes in the way U.S. military forces conduct contingency operations. Joint and combined doctrine is quickly evolving and has impacted on the way the ASBP must function to meet operational requirements. The ASBPO has taken action to ensure that joint blood doctrine is published and accessible to the field. ASBPO's review of joint doctrine has pointed out some limitations that require action in order to enhance blood capabilities.

AP1.8.2.2. Discussion. The ASBP Distribution System doctrine is published in Joint Pub 4-02 (reference (f)). Joint blood technical procedures are further specified in Joint Pub 4-02.1 (reference (m). Additionally, proper blood usage and information on the joint blood distribution system is in the DEPMEDS Policies, Guidelines, and Treatment Briefs. That blood distribution system has been in place for some time, but continues to evolve to meet new requirements and new technologies. Impact of blood products e.g., platelets and blood substitutes (listed in paragraph AP1.8.2.4. below) must be evaluated and included in joint doctrine.

AP1.8.2.3. Objective. Develop joint blood doctrine to support Combatant Command requirements.

AP1.8.2.4. Task. Evaluate the impact of the use of blood components and substitutes (e.g. fibrin bandage, platelets, plasma, red cells, etc.) on joint medical doctrine and R&D (RCD: 12/2002, PAO: the Services and the ASBPO).

AP1.8.3. Action Plan 28. Operations – Peacetime.

AP1.8.3.1. Background. Because the ASBP must be operational during peacetime, in order for it to provide blood products at a moments notice, it has an added advantage of providing blood products for military treatment facilities for peacetime care. Blood system personnel are trained for similar wartime mission by performing their peacetime duties. Currently, peacetime blood operations do not utilize frozen blood in an adequate amount to keep personnel proficient in frozen blood techniques for contingencies and to manage local inventories. New products are currently available to reduce the risk of transfusion transmitted infections.

AP1.8.3.2. Discussion. Frozen blood should be included in the Services' major MTFs as a useful supplement to blood inventory. Emerging technologies such as solvent detergent plasma can reduce the risk of transfusion transmitted infections. Therefore, those technologies need to be integrated into local peacetime blood operations.

AP1.8.3.3. Objective. Develop and maintain peacetime blood operations that support the continuum of operations.

AP1.8.3.4. Tasks

AP1.8.3.4.1. Implement use of frozen red blood cells in select MTFs as appropriate to manage local red cell inventories, meet clinical requirements, and to maintain training for wartime readiness (RCD: 3/99, PAO: the Services).

AP1.8.3.4.2. Integrate FDA licensed solvent detergent plasma in transfusion hemotherapy (RCD: 3/99, PAO: the Services).

AP1.8.4. Action Plan 29. Operations – Contingency.

AP1.8.4.1. Background. The main purpose of the ASBP is to maintain the ability to provide the Combatant Commands the right types of blood products at the right place, right time, and in the right amounts. That ability requires continuous improvements. Changes in the way the Department of Defense handles contingencies also impacts on that capability. Current capabilities are limited by inadequate communication infrastructure, insufficient manning and supplying of BPDs, and inadequate platelet collection and/or distribution. Also, blood planning factors, Service blood requirements and/or capabilities, must be re-evaluated based on new technologies. Verification and validation of ID cards and tags are required for use in emergency transfusion, and to improve the standard of care for Rh-negative females in a field environment.

AP1.8.4.2. Discussion. Blood is one of the pillars of medical care. The ASBP, during wartime, begins at the BDC and ends at the transfusion of the patient at the MTF in the field. Every aspect of that program must be monitored in order to make it work efficiently. Operations ODS, and Restore Hope have provided lessons that the ASBPO uses for continued improvement. Those issues are complex, and their review and completion must be coordinated through many organizations.

AP1.8.4.3. Objective. Continually update wartime blood capabilities based

on DPG (reference (d)) and develop programs, doctrine, policies and procedures to ensure implementation.

AP1.8.4.4. Tasks

AP1.8.4.4.1. Establish and improve a means to provide platelets in a field environment (RCD: 12/2002, PAO: the Services).

AP1.8.4.4.2. Ensure accuracy of blood groups on identification tags and cards (RCD: 5/99, PAO: the Services).

AP1.8.4.4.3. Determine impact of emerging blood technologies and changing clinical practices on blood planning factors (RCD: 12/2002, PAO: the ASBPO).

AP1.8.4.4.4. Determine if DEPMEDS blood policies and guidelines are applicable for MOOTW (RCD: 1/99, PAO: the DMSB).

AP1.8.4.4.5. Provide a TDBSS and JTAV interface for Combatant Command blood asset visibility (RCD: 6/99, PAO: the TMA(IMT&R) and the TMIP PMO).

AP1.8.4.4.6. Complete all planned BPD projects (RCD: 1/99, PAO: the Army).

AP1.8.5. Action Plan 30. R&D.

AP1.8.5.1. Background

AP1.8.5.1.1. Since World War II, the military has been at the forefront in blood R&D. The military provided the first anticoagulant to allow blood to remain viable outside the body. The use of plastics instead of glass bottles by the military has revolutionized the world's blood banking capabilities. Military blood requirements and military blood R&D have always been an inspiration for civilian blood R&D as well.

AP1.8.5.1.2. The ASBP continues to strive for and provide the best and safest blood products available to meet medical readiness requirements and peacetime needs. Because of logistics, the blood product formulations for peacetime differ from those for medical readiness. Nevertheless, the standard of care for transfusion medicine practices in peacetime must be met in the combat trauma setting. The

challenge for the blood R&D is to develop formulations of blood products and their substitutes to satisfy the standard of care in all contingencies and to accommodate doctrinal changes.

AP1.8.5.1.3. The ASBPO must continue to work hand-in-hand with the R&D community in each of the Armed Services to ensure that those requirements receive priority.

AP1.8.5.2. Discussion

AP1.8.5.2.1. Major areas of focus for the R&D efforts are, as follows:

AP1.8.5.2.1.1. Theater collection of red cells, platelets, and plasma to include on-site sterilization of blood products for the inactivation of blood-borne pathogens (viruses, bacteria, and parasites).

AP1.8.5.2.1.2. Methods for storage of red cells, platelets, plasma and their substitutes.

AP1.8.5.2.1.3. Blood products and hemostatic agents for far-forward and surgical homeostasis for far-forward use.

AP1.8.5.2.1.4. Automated field production of water for injection.

AP1.8.5.2.1.5. Rapid test procedures for detection of infectious diseases.

AP1.8.5.2.1.6. Blood products and blood planning factors for NBC environments.

AP1.8.5.2.2. Fibrin tissue adhesives will ultimately save lives and reduce the requirement for blood products. Extending red cell and platelet storage will ensure blood product availability.

AP1.8.5.2.3. Improvement in plasma storage will reduce the significant loss of plasma from bag breakage. The development of blood substitutes will not only assist in ensuring blood product availability but will also provide far-forward capability. In-theater collection and sterilization will ensure blood product availability in environments that preclude accessibility of transported blood. There is no single ideal product to meet all contingencies and therefore the R&D efforts must not be construed as redundant. Rather, they are designed to meet all contingencies by filling

the gaps in blood product support.

AP1.8.5.3. Objective. Improve safety, efficacy, and availability of blood products to meet all contingencies by supporting, monitoring, and assisting transfusion medicine related research of fibrin tissue adhesives, red cells, platelets, plasma and their substitutes, and incorporate new technologies (e.g., rapid test procedures and automated system for injectable water), as they become available.

AP1.8.5.4. Tasks

AP1.8.5.4.1. Develop appropriate local hemostatic agents (e.g., fibrin sealant, fibrin glues, fibrin bandages; etc.) for far-forward and surgical control of bleeding (RCD: 9/2001, PAO: the Army and the Navy).

AP1.8.5.4.2. Develop the capability to extend the shelf life of blood products (e.g., red cells, platelets, plasma; etc.) (RCD: 9/2003, PAO: the Army and the Navy).

AP1.8.5.4.3. Determine blood product requirements and blood planning factors in NBC environments (RCD: 10/99, PAO: the Army and the Navy).

AP1.8.5.4.4. Determine feasibility of in-theater collection of platelets (RCD: 7/99, PAO: the Services).

AP1.8.5.4.5. Develop universally transfusable blood products and substitutes (e.g., stroma-free hemoglobin, liposomal encapsulated hemoglobin, and enzymatically converted red cells) (RCD: 9/2002, PAO: the Army and the Navy).

AP1.8.5.4.6. Develop sterilization and rapid infectious disease detection techniques for blood products (e.g., red cells, platelets, plasma, and whole blood; etc.) (RCD: 9/2001, PAO: the Army and the Navy).

AP1.8.5.4.7. Determine the effects of hemorrhagic shock on blood product utilization (RCD: 12/2000, PAO: the Army and the Navy).

AP1.8.5.4.8. Establish an annual review process for current military and civilian blood R&D initiatives (RCD: 2/99, PAO: the ASBPO).

AP1.8.5.4.9. Develop automated field production of water for injection (e.g., blood product washing, and reconstitution; etc.) (RCD: 10/2002, PAO: the Army and the Navy).

AP1.9. MOOTW

AP1.9.1. Action Plan 31. MOOTW MHS Mission.

AP1.9.1.1. Background

AP1.9.1.1.1. The MOOTW IPS in the current DPG (reference (d)) describes relatively extensive nation assistance and/or peace building missions and/or roles for DoD support functions such as engineering and transportation. Given that scenario and the frequent expansion of roles (known as "mission creep") in recent MOOTW deployments, there is a question whether national policy regarding the MHS has evolved from short-term medical relief and/or humanitarian assistance to more extensive rehabilitation, reconstitution, and reconstruction roles.

AP1.9.1.1.2. Over the past few years MOOTW missions have been hampered by inadequately formulated mission statements, nebulous endpoints, and lack of MHS MOEs. Experience in previous MOOTW has proven that the lack of an effective transition Plan delays the timely redeployment of scarce medical assets. JULLS items from the Hurricane Andrew MSCA operation cited the need for better understanding of mission requirements and organizational relationships, clearer policy regarding primary care to civilians, better tailoring of provider mix, and improved transition planning (i.e., exit strategy) in coordination with "hand-off" organizations and/or Agencies. Lessons learned have also indicated that disaster response planning should be limited to organic medical support units and preventive health service enhancement. DEPMEDS assemblages have been problematic. Their size makes them difficult to move; their extensive capability tends to produce "mission creep;" and they are organized for trauma support rather than community health service. The MHS MOOTW subject matter experts confirmed those findings as common in their MOOTW experience.

AP1.9.1.1.3. During ODS, casualty reception planning with the VA was hindered by limited sharing of information on casualty flow and type. Although specific DoD casualty information was classified, general information could have been shared that would have significantly improved casualty flow planning. Coordinated patient flow planning for the VA is particularly important for response to large scale natural disasters such as earthquakes.

AP1.9.1.2. Discussion. A clear mission statement with concise goals and/or objectives refines planning and aids planning accuracy. Operations must be

conducted in concert with local civilian medical professionals and DoD TRICARE MCS contract networks in a way that minimizes cultural and economic impacts. Planning must address (at the earliest stages) how DoD assets can best be used and when they can be withdrawn. Clearly defined endpoints and exit strategies are necessary in order to accomplish timely transition. The mission statement, end points, and MOEs must be determined at the beginning of the mission to preclude deployment of excessive forces or incorrect force packages. The VA and the DHHS possess extensive capabilities that should be fully integrated with DoD planning for theater patient reception and MSCA in CONUS.

AP1.9.1.3. Objective. Develop a clear mission statement supported by concise objectives, reasonable endpoints, and measures of effectiveness for the MHS in MOOTW (Foreign and Domestic).

AP1.9.1.4. Tasks

AP1.9.1.4.1. Establish policies and procedures to include the VA, the TRICARE contract networks, and the NDMS in casualty flow planning and execution (RCD: 10/99, PAO: the USACOM and the USTRANSCOM).

AP1.9.1.4.2. Develop policy for MSCA. Policy will address the employment of DoD MHS assets with the DHHS and VA during execution of Emergency Support Function #8 under the FRP (RCD: 10/99, PAO: the OASD(HA)(HOP)).

AP1.10. NBC

AP1.10.1. Action Plan 32. CMs.

AP1.10.1.1. Background

AP1.10.1.1.1. Use of effective medical CMs before, during, and after exposure to a nuclear, biological and/or chemical attack is absolutely critical to force protection and sustainment. Medical CMs include materiel such as vaccines, chelating agents, prophylactic drugs and supportive therapies as well as appropriate training and time-sensitive flow of information. The need for those CMs is addressed in specific MNS developed in the combat community and implementation policies in DoD Directive 6205.3 (reference (w)) and Army Qualitative Research Requirements for Nuclear Weapons Effects Information, FY 95 and 96 Edition (reference (x)).

AP1.10.1.1.2. In after-action reports following ODS, the Services identified critical deficiencies in medical CMs to radiation hazards, BW and CW. This was reinforced in findings by the GAO in that DoD emphasis was insufficient to resolve continuing problems (CB Defense (GAO/NSIAD-96-103, reference (y)) provided to Congress on 29 March 1996). The major areas of concern were lack of appreciation at senior levels of the severity of the radiological, biological, and chemical threats, deficiency in vaccine availability in the industrial base, lack of a DoD vaccine production capability, and a lack of training for health care personnel in medical BWD and CD. The GAO produced a separate report (GAO/NSAID-93-90 reference (z)) on depleted uranium contamination which demonstrated the deficiencies in radiation exposure modeling, contamination monitoring, radioactive waste control, storage, shipping, internal dose assessment, and adequate training to unit level soldiers through senior leadership.

AP1.10.1.1.3. NBC defense activities at all levels currently receive a low priority. That results in lower funding, staffing, monitoring, and mission priority for NBC defense activities. The GAO noted that senior commanders accept BD and/or CD unpreparedness, based on the belief that resources currently devoted to that area are appropriate.

AP1.10.1.1.4. There are unique ethical and regulatory development issues for NBC defense CMs which impact on DoD's ability to field licensed products. The Department of Defense cannot perform human field studies to demonstrate efficacy because of the ethical and legal issues involved in deliberately exposing humans to hazardous, toxic, or lethal NBC agents.

AP1.10.1.1.5. Deficiencies exist in the quantity of biological agent vaccine, chelating agents, blocking agents, and anti-emetic drug stocks held by the Department of Defense and in implementing existing policies and plans for their use. The inability to provide timely NBC medical products to the battlefield continues due to limited vaccine production capability, limited stockpiles, and minimal interest within the industrial base.Deficiencies also exist in the stock piles of chemical agent treatment and pre-treatment products.

AP1.10.1.1.6. Despite DoD efforts to improve readiness of U.S. Forces to operate in a biological, nuclear or chemical environment, serious weaknesses remain in the areas of equipment and training. That lack of training makes it even more important to field medical CMs to minimize casualties. Another weakness that impacts medical readiness is a low proportion of operational health-care personnel

trained in BW and/or CW casualty management. The GAO noted that joint exercises include little BD and/or CD training despite doctrine requiring all joint exercises to incorporate NBC situations with prolonged operations in an NBC environment.

AP1.10.1.1.7. The GAO documented that there is little or no training being conducted on casualty decontamination from CB agents at most of the early deploying medical units. There is confusion among these units regarding who was responsible for performing that task. According to doctrine, tactical units are expected to conduct initial casualty decontamination before their evacuation or arrival at MTFs. Lessons from ODS and Bosnia noted that some units lacked training on procedures for casualty decontamination and bioassay, monitoring for radiological contamination, and assessing the risk associated with exposure to low-level radiation.

AP1.10.1.2. Discussion

AP1.10.1.2.1. Leaders at all levels require accurate and balanced information on the effectiveness and limitations of medical and non-medical CMs in order to make an informed decision regarding the risks and the implementation of the existing CMs and mission tasking. Lack of awareness and training deficiencies need to be addressed by comprehensive initiatives at all organizational levels. Special NBC awareness presentations need to be developed to ensure that senior DoD leadership makes informed decisions on implementation of CMs, based on accurate and balanced information on the effectiveness and limitations of medical and non-medical CMs.

AP1.10.1.2.2. The Department of Defense must continue to maintain an active research, development, test and evaluation program for medical CMs for NBC defense. Because medical NBC CMs are unique and the military PAR is perceived to be relatively small by commercial developers, there is a limited commercial market associated with their production. That lack of industrial base support results in an insufficient stockpile of available CMs. Some CMs are required to be administered within minutes of exposure to the NBC agents. Those CMs have to be stockpiled at unit level or the next higher logistics base capable of providing rapid support. The Department of Defense has begun to address that shortfall; however, until the proposed approach is fully implemented, DoD ability to provide needed CMs will remain deficient. Interim solutions to that deficiency must be addressed.

AP1.10.1.2.3. It is essential that health-care personnel are trained and vaccines are developed and used preventively to immunize the force and establish timely immunity, thus avoiding the logistical problems with immunizing a deployed force. In addition, there is a need for appropriate medical record keeping . A

state-of-the-art R&D base is necessary to counter current and emerging NBC threats. Experience has shown that a strong, integrated, passive defense is an effective deterrent to use of chemical agents on the battlefield. There is good reason to believe that the same will be true for BW and NW defense.

AP1.10.1.2.4. The current patient decontamination doctrine for echelons I-III is not practical. Current doctrine recognizes medical units lack the manpower to conduct patient decontamination procedures and relies upon supported tactical units for additional manpower to perform that mission. Doctrine needs to be critically reviewed and tested in real-world scenarios in a field training environment.

AP1.10.1.2.5. It is imperative that medical and line authorities coordinate, develop, and test NBC doctrine and equipment. Both line and medical units have similar mission criteria such as personal protective equipment, collective protective equipment, and decontamination procedures.

AP1.10.1.2.6. NBC defense is a PM concern during deployment situations. NBC hazards in today's operational environment are not adequately addressed in preventive medicine doctrine and OPLANs.

AP1.10.1.3. Objective. Ensure joint, integrated planning, development and implementation of practical and effective medical NBC CMs, including prophylaxis, CMs, diagnostics and therapy.

AP1.10.1.4. Tasks

AP1.10.1.4.1. Develop a standardized, automated tracking mechanism for tracking personnel immunizations and other appropriate medical CMs and surveillance data (RCD: 9/99, PAO: the OASD(HA)(HOP), the TMA(IMT&R), the CHCS II PMO, and the Services).

AP1.10.1.4.2. Assign an NBC medical expert (i.e., at a minimum MENW and MMCBC and/or FMCBC trained) on the surgeon staff to the Combatant Command responsible for medical NBC matters, who will be able to identify and discuss the operational impacts of NBC weapons, as well as their CMs (RCD: 6/99, PAO: the Combatant Commands).

AP1.10.1.4.3. Establish a procedure to ensure medical coordination during the development and testing of personal protective equipment, collective protective equipment, and decontamination procedures to ensure their effectiveness against the NBC threat (RCD: 6/99, PAO: the Services).

AP1.10.1.4.4. Develop contingency plans for the five most critical Biological Defense vaccines to include approval process, training of medical personnel, troop briefings, documentation, tracking, and medical monitoring (RCD: 6/99, PAO: the Army).

AP1.10.1.4.5. Critically review the feasibility of implementing the current patient decontamination doctrine of using supported units' manpower and report the results to the TRC and/or the ASD(HA) (RCD: 6/99, PAO: the Services).

AP1.10.1.4.6. Procure and stockpile sufficient medical CMs to meet operational needs for NBC threats. Develop a process to monitor sustainment and/or replacement of medical CMs beyond initial acquisition (RCD: 10/99, PAO: the Services).

AP1.10.1.4.7. Resource the requirement to provide collective protective shelters for field medical facilities and report the results to the TRC (RCD: 10/99, PAO: the Services).

AP1.10.1.4.8. Develop new threat information for emerging radiological hazards and other toxicological hazards encountered in operations other than war (RCD: 9/2003, PAO: the AFMIC).

AP1.10.1.4.9. Develop a medical NBC defense awareness course for senior level DoD personnel (RCD: 9/99, PAO: the Army).

AP1.10.2. Action Plan 33. Response.

AP1.10.2.1. Background. The medical response to use of NBC weapons on the battlefield (delivered by weapons or special operations agents) or as a terrorist act, poses significant challenges to DoD abilities to sustain operations and provide timely medical responses. Significant problems are presented by the rapid onset of disease, incapacitation by chemical agents, lack of timely radiation dose assessment, the potential for large numbers of NBC casualties, lack of sufficient therapeutic modalities, and the infrequency with which those diseases are observed in normal clinical settings. In addition, the potential for secondary spread for certain biological agents and radiological contamination, and the combined effects of multiple NBC and conventional insults, will compound treatment and transport of exposed personnel. Those characteristics create a challenging environment for medical support. The Services recognize, and the GAO corroborates, deficiencies within the military in DoD capabilities, doctrine, planning, training, and support. The Commanders have not

adequately planned, exercised, and wargamed NBC scenarios. Thus, doctrine and planning guidelines for medical support do not realistically address NBC warfare; operational plans do not reflect the full range of the actual threat; prohylaxis capabilities are insufficient and medical logistical support will be insufficient for a NBC medical response.

AP1.10.2.2. Discussion

AP1.10.2.2.1. The medical response to an NBC attack requires quantitatively and qualitatively different approaches than an attack with conventional weapons. The introduction of an NBC environment changes the scope and focus of the medical response.

AP1.10.2.2.2. Casualty estimates are essential to develop doctrine, design realistic operational and support plans, and to supply the battlefield. Current models do not predict casualties in NBC scenarios and are inadequate to develop doctrine, prepare plans, or support NBC defensive operations.

AP1.10.2.2.3. Doctrine is prepared by joint and Service Agencies to formalize the military response to anticipated strategic and tactical situations in order to ensure mission success. Current medical support doctrine does not sufficiently emphasize how to deal with NBC threats and the combined NBC effects to include DNBI. Current doctrine does not work for decontamination of large numbers of NBC casualties. The operational commander, at levels from theater to small operational units, cannot be ansured of adequate force protection without the guidance of reasonable and realistic doctrine for NBC medical response.

AP1.10.2.2.4. The development of doctrine is a process that relies heavily on input from the operational commanders. Those commanders evaluate doctrine by exercising operational plans built upon that doctrine. The new doctrine required for operations in an NBC environment must be integrated into operational plans and annexes, and those plans must be routinely exercised at every operational level. By necessity, joint NBC plans and exercises must be a uniquely cooperative effort between medical and operational personnel.

AP1.10.2.2.5. Under most NBC scenarios, medical personnel have a limited window of opportunity to intervene and prevent significant mission degradation. The capability exists for decontaminating chemically exposed patients prior to transport. However, it is questionable whether the current logistical support system can adequately support requirements in a NBC environment, especially in mass

casualty situations where those contaminated patients need evacuation for definitive care. The technology exists for measuring low levels of NBC agents and toxic industrial chemicals using lightweight, portable systems to quantify the hazards and to provide a health risk assessment. Coordination is required among the Services to ensure that the capability is budgeted, developed, and embedded in deploying medical units and that they are sufficiently robust to provide the area of coverage in the theater of operations.

AP1.10.2.2.6. Current medical evacuation doctrine assumes all patients will be decontaminated before they are transported to limit the number of evacuation assets that will become contaminated (Joint Pub 3-11 reference (v)). Air Force procedures do not allow for transport on fixed-wing aircraft of radiologically, biologically and chemically contaminated patients. However, the Air Force must develop procedures for evacuating NBC contaminated casualties.

AP1.10.2.3. Objective. Manage personnel exposed to NBC environments to prevent incapacitation and death and maximize their ability to recover and sustain military operations and critical functions. Mitigate the impact of NBC attack on the operational environment.

AP1.10.2.4. Tasks

AP1.10.2.4.1. Update and formalize JTTPs for the medical management of NBC casualties to address the issues of operations, decontamination, treatment, tracking, and/or evacuation and/or quarantine of large numbers of personnel exposed to specific BW and/or CW agents or nuclear radiation hazards, to or through foreign territories (RCD: 2/2000, PAO: the Chairman of the Joint Chiefs of Staff and the Services).

AP1.10.2.4.2. Integrate newly developed NBC medical defense JTTPs into OPLANS and fixed facility Emergency Response Plans; exercise, wargame, and evaluate the effectiveness of those plans for NBC attack response (RCD: 2/2000, PAO: the Combatant Commands and the Services).

AP1.10.2.4.3. Develop treatment guidelines for medical management of radiation casualties and casualties resulting from a combination of radiation with conventional, biological, and/or chemical injuries (RCD: 9/2003, PAO: the AFRRI).

AP1.10.2.4.4. Review and develop procedures as applicable for transporting NBC contaminated casualties (RCD: 2/2000, PAO: the Air Force).

AP1.10.2.4.5. Raise medical supply levels to support NBC casualty and/or prevention treatment, prepositioning as appropriate and upgrading the "push" supply system to allow for surge response (RCD: 6/99, PAO: the Services).

AP1.10.2.4.6. Develop adequate medical casualty modeling for the full spectrum of NBC threats to allow for medical treatment and evacuation planning. Integrate that modeling into appropriate OPLANS (RCD: 6/99, PAO: the Chairman of the Joint Chiefs of Staff and the Services).

AP1.10.3. Action Plan 34. Surveillance, Diagnosis, and Identification.

AP1.10.3.1. Background

AP1.10.3.1.1. Current surveillance, diagnosis, and identification of NBC agent exposure is inadequate. Rapid detection and/or identification methods have yet to become available to field units or deployable medical units. Furthermore, effective planning and response to battlefield or terrorist attacks must be based on an ability to quickly identify the nature of the attack against the natural background of endemic disease. Surveillance data of endemic diseases is fragmented, incomplete and compartmentalized. Current military disease surveillance systems lack both inter- and intra-Service integration. They are also too rudimentary, labor intensive, and slow to allow early recognition of a BW attack.

AP1.10.3.1.2. Insufficient capability for rapid identification of disease agents and environmental monitoring capability hamper BW surveillance efforts. While more senior leadership is being placed on BW concerns, appropriate changes have not yet been implemented.

AP1.10.3.1.3. Above all, enhanced capability to rapidly evaluate exposure to biological and chemical weapons from clinical samples at forward deployed as well as rear echelon levels of medical care is crucial and critically lacking. Patients may well be the first and only indicator of attack with those agents. Current capability for rapid diagnosis of radiation exposure is also inadequate. When patients arrive at MTFs, there is no expedient method to determine the nature and extent of exposure thus posing the risk of secondary transmission as well as direct risk to the primary exposed patient.

AP1.10.3.1.4. Although field level capability exists for assessing most radiological environments, the use of that capability to assess radiological threats associated with MOOTW operations is not well understood nor trained. The fielded

alpha radiation detectors are prone to failure and low-energy beta monitoring equipment is not available. The impact of internal contamination relative to existing and proposed operational exposure guidance has not been integrated, nor are procedures and/or guidance currently available to assess the extent of such contamination. DoD experience with personnel injured with DU fragments returning from ODS has shown a critical need for field and/or theater-level assessment of potential internal radiation exposure. Research into more field expedient methods for assessing the extent of external as well as internal radiation dose is also lacking. Finally, there is little inter-Service coordination in standardizing needed radiological detection and/or diagnostic capability and methods for medical data collection and reporting.

AP1.10.3.2. Discussion

AP1.10.3.2.1. Disease surveillance strategies worldwide are being re-engineered to keep pace with technological advances. The same process needs to occur in the military if NBC defense is to be effective. Greater emphasis needs to be placed on disease surveillance both in an NBC environment and during nonconventional operations. It is critical to capture and report timely, realistic, background disease incidence and/or prevalence data from both indigenous populations and U.S. Forces at risk. That can only be accomplished through an automated, standardized disease surveillance system whose information may be shared by all the Services. Only then will the surveillance system be sufficiently robust to allow timely recognition of unusual disease occurrence that may be the result of an NBC attack. The disease surveillance system as it exists today is unable to accomplish that task.

AP1.10.3.2.2. A second critical requirement for providing early recognition of an NBC attack is the ability to rapidly detect and identify those threats in the operational area. The need for improved environmental BW detection is the number one priority of the warfighting Commanders of the Combatant Commands for future research and acquisition programs. Critical detection needs also exist for chemical and radiological operational environments. Medical personnel also need the capability to rapidly identify the extent of NBC exposure of patients and staff at the MTFs. To the maximum extent possible, that capability should be standardized among the Services to facilitate joint operations. Currently, the Services all use distinctly different radiation detection capability that complicates logistics support and reduces cross-Service functionality.

AP1.10.3.2.3. A recent GAO report cited the Army as being unprepared for dealing with hazards to personnel presented by DU contamination

(GAO/NSAID-93-90 (reference (z))). The Services have a similar problem with other radiological threats that could be present in the operational area (e.g., reactor accidents and/or incidents, terrorist activities, and radiological dumps). A similar situation exists in the chemical environment from the standpoint of non-warfare related chemical exposure (i.e., chlorine gas). Medical personnel need the capability to rapidly identify the extent of chemical and radiation exposure of patients at the MTFs in order to appropriately triage for decontamination and treatment, and to ensure protection of the medical staff.

AP1.10.3.2.4. Better coordination is required between medical and non-medical communities, and across the Services, to develop, field, operate and integrate information on the identification of an NBC event. R&D efforts should incorporate medical information into the design and development of environmental detectors, and alternatively, environmental systems capabilities should be evaluated for potential use in clinical diagnostics. Operationally, medical and non-medical communities in single, joint, and combined environments must identify methods for rapid sharing of information following identified use of an NBC agent.

AP1.10.3.2.5. Evaluation of NBC agent surveillance, detection, and identification capabilities also need significant improvement. NBC detection and identification capabilities must be frequently evaluated during routine operations to ensure success in an NBC threat environment. Deficiencies must be reported and incorporated into both joint and individual Service training plans. Without considering monitoring in those areas, the problems will not be identified and corrected.

AP1.10.3.3. Objective. Ensure integrated planning, development, and implementation of a rapid, seamless and responsive medical and environmental surveillance, detection and tracking system using DoD and MHS data architecture and standards.

AP1.10.3.4. Tasks

AP1.10.3.4.1. Expand the scope of the automated patient information system to ensure standardized medical surveillance data collection. Include such elements as sources and magnitude of NBC exposure, medical treatments administered and reporting so that it can be more effectively used in a joint environment. That database should facilitate long-term medical follow-up (RCD: 9/2003, PAO: the TMA(IMT&R), the CHCS II PMO, and the CEIS PMO).

AP1.10.3.4.2. Develop intelligence assessments and forecasts on environmental health factors and infectious diseases of operational importance that can be easily accessed by field users (RCD: 9/2003, PAO: the AFMIC).

AP1.10.3.4.3. Establish a tri-Service working group to coordinate, plan, develop, and implement capabilities for theater diagnostic laboratories for NBC agents (RCD: 2/99, PAO: the OASD(HA)(HOP) and the Services).

AP1.10.3.4.4. Ensure incorporation of NBC surveillance, detection, and identification aspects into joint exercises for evaluating readiness capabilities (RCD: 6/99, PAO: the Chairman of the Joint Chiefs of Staff and the Services).

AP1.10.3.4.5. Develop a process to ensure coordinated medical input from the Services into the development and fielding of NBC detection devices (RCD: 6/99, PAO: the Services).

AP1.10.3.4.6. Develop field expedient method for accomplishing internal dosimetry for deployed forces operating in radiation environments (RCD: 9/2003, PAO: the Services).

AP1.10.3.4.7. Deploy rugged and durable radiation monitors (e.g., semiconductor based) with alpha and low-energy beta capability for PM and FHs (RCD: 9/2003, PAO: the Services).

AP1.10.3.4.8. Develop a capability to determine qualitative and quantitative levels of exposure to CW agents (RCD: 9/2003, PAO: the Army).

AP1.10.4. Action Plan 35. Training.

AP1.10.4.1. Background

AP1.10.4.1.1. Serious problems still exist in NBC training, knowledge and skills for DoD medical personnel as identified in the GAO/NSIAD-96-103 (reference (y)). A primary problem is that medical NBC training requirements are not formally identified or mandated to meet readiness needs for deployable medical personnel. Military physicians supporting deploying units need training on management of casualties in an NBC environment. The majority of physicians currently assigned to deploying units have not completed the MMCBC or MENW courses.

AP1.10.4.1.2. Currently, the optional MMCBC course provides 6.5 days of classroom and field instruction to military primary care providers. That course is offered on an optional basis and is designed to establish the essential skills to save lives, minimize injury, and conserve the fighting strength in a BC environment. Attendance of the MMCBC course is neither required nor targeted toward physicians assigned to early deploying units or individuals otherwise needing that training. During ODS, that course was provided on an emergency basis to medical units already deployed to the theater.

AP1.10.4.1.3. The MMCBC course is primarily an Army course for active Army personnel. The course is provided 4 times a year with a maximum student load of 70 students for each course. Although an exportable version of the course is taught by a mobile training team at sites around the world, historically, fewer than 100 physicians are trained annually. Limited student billets are currently available for either resident or mobile courses for Air Force or Navy personnel. While a significant portion of deploying units are in the Reserve and the National Guard, their participation is minimal.

AP1.10.4.1.4. The MMCBC course was designed for physicians. However, many other health-care support personnel are currently attending to fulfill their training needs in patient triage, decontamination, evacuation, hazard assessment, operation planning, and patient diagnosis. The MMCBC Course was not designed to meet all those needs. There is a need for a separate course to address BC field management issues.

AP1.10.4.1.5. The DPG (reference (d)), requires medical NBC readiness for a range of contingencies, from MOOTW to general war. The chance of encountering significant radiological threat from either nuclear weapons or other radiation sources (i.e., dispersal weapons, damaged reactors; etc.) continues to increase. ODS after action reports (e.g., GAO/NSIAD-93-90 (reference (z)) and the Army's Groundfire 95 Low-Level Radiation Issues Workshop, (reference (aa))) and current experience in Bosnia indicate training shortfalls in low-level radiation and DU exposure guidance. Although not addressed in previous reports, physicians also need training on the effects and treatment of radiation in combination with injuries, chemical attacks, and biological attacks, as well as, training in management of directed energy casualties.

AP1.10.4.1.6. The MENW course is an optional 4-day tri-Service course provided to DoD health care and disaster preparedness personnel. The course is

designed for primary care providers and is given twice a year in the Washington metropolitan area to approximately 100 students for each course. An exportable version of the course is also provided by a mobile training team at sites around the world. Approximately 45 percent of the course attendees are primary care providers. Currently, student billets are available for the resident or mobile course based on the Services' ability to pay.

AP1.10.4.1.7. Historically, the MENW course annually trained up to 1200 students worldwide. That number has dropped, however, to about 450 for each year since funding of the course was transferred to the Services in FY 1994. That is inconsistent with a growing risk of nuclear threats.

AP1.10.4.1.8. The MENW course should be strengthened by addressing radiological issues for MOOTW, such as nuclear reactor releases, low-level radiation environments, unintentional radiological hazards, or directed energy casualty management. Directed energy casualty training and MOOTW radiological hazards training is not currently available for medical personnel. Those training shortfalls may be fulfilled by incorporation into current NBC courses or by development of new courses.

AP1.10.4.1.9. The MMCBC and MENW courses provide baseline NBC skills for designated primary care providers and medical support personnel. Those skills may be supplemented by other DoD and non-DoD courses, where appropriate, to maintain individual medical NBC proficiency.

AP1.10.4.1.10. Except for the initial training provided by the MMCBC and the MENW courses, there is no formal program to sustain readiness in NBC medical skills. By developing a train the trainer program, physicians and support personnel can meet continuing education needs and maintain an appropriate level of medical readiness.

AP1.10.4.1.11. Global deficiencies in common task training and skills of medical personnel exist especially in NBC survival. The commanders need to address that issue prior to deployment. During Operation Desert Storm, many medical personnel deployed could not properly perform basic NBC skills (GAO/NSIAD-96-103 reference (y)). Problems included the inability to properly don protective masks, improper deployment of detection equipment, inability to administer chemical agent self-aid or buddy aid, inadequate planning on the evacuation of casualties exposed to CB agents, and failure to integrate CB issues into operational plans.

AP1.10.4.1.12. Integrated medical and combat training opportunities need to be increased (see Action Plan 35). Training opportunities need to include NBC scenarios that require integrated and/or joint-Services' actions, planning, and training that exercise the entire medical process. The failure to include NBC play has limited the ability to assess the capability of the military health-care systems to meet those requirements.

AP1.10.4.2. Discussion

AP1.10.4.2.1. Complete training in NBC and directed energy casualty care is required to maintain readiness and conserve the fighting strength of the Department of Defense. Attendance at the MMCBC and the MENW courses is the first phase for military clinicians to be ready for deployment to a NBC environment. The billets for deployable medical units in the primary care specialties shall be coded by the individual Services for developing and maintaining NBC medical management skills. Directed energy casualty management and MOOTW radiological hazard training should be developed and incorporated into the appropriate NBC course. Modification in content or expansion of medical NBC training programs should be based on training requirements identified by the Chairman of the Joint Chiefs of Staff and the Services. Expansion of the existing NBC training program will require tri-Service support for instructor personnel, funded training billets, and participation.

AP1.10.4.2.2. Technological innovations such as interactive CD-ROM, VTT, or VTC will expand the tri-service participation in NBC casualty care. Acquisition and development of those innovations enhances readiness training opportunities but requires tri-Service support for planning, development, and maintaining the remote training or VTT. Remote training augments and does not replace the need for any of the resident NBC courses.

AP1.10.4.2.3. A FMCBC course is being developed to meet the tri-Service medical support requirements and is intended for nonclinical health-care support personnel. That course shall be required for deployable medical unit personnel (Service-specific identified). It will emphasize casualty management prior to arrival to MTFs (e.g., decontamination, agent detection, equipment use, medical operations planning, CB agent effects and characteristics, required PPE and/or MOPP equipment).

AP1.10.4.2.4. A train-the-trainer course in management of NBC casualties should be developed to meet the tri-Service medical requirements.

Individuals trained in that course will serve as unit experts in management of NBC casualties and will instruct personnel in NBC skills. They will serve as the commander's point of contact for information exchange from higher headquarters in medical NBC doctrine and practice. As a minimum, each deployable echelon II or echelon III MTF will identify an individual to be a medical NBC trainer.

AP1.10.4.2.5. Specific evaluation of individual readiness to include NBC survival skills and NBC directed energy casualty management is needed for all medical units and/or facilities. The Services shall develop a process to evaluate the ability to properly don protective equipment, to properly deploy detection equipment, to administer chemical agent self-aid or buddy aid, to plan for the evacuation of casualties exposed to radioactive contamination or CB agents, to identify ionizing and nonionizing radiation effects, and to integrate NBC issues into operational plans. Individuals who are deficient shall be trained to correct the deficiency.

AP1.10.4.3. Objective. Ensure joint and integrated medical training for NBC defense and medical management of NBC casualties to include preventive measures, recognition, decontamination, and patient management.

AP1.10.4.4. Tasks

AP1.10.4.4.1. Develop an oversight process that measures medical NBC readiness training at MTF's and inactive and Reserve component units. Oversight must include evaluation of common task training, especially NBC survival and NBC casualty management skills**,** and implement Service-specific training corrective measures (RCD: 2/99, PAO: the Services).

AP1.10.4.4.2. Insert NBC defense training into unit level field medical training (e.g., Medical Red Flag) and evaluate the effectiveness of the training (RCD: 2/99, PAO: the Services).

AP1.10.4.4.3. Establish joint-NBC training requirements for medical personnel (RCD: 6/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.10.4.4.4. Expand the MMCBC to meet the tri-Service deployment requirements (RCD: 2/99, PAO: the Army lead, the Navy, and theAir Force).

AP1.10.4.4.5. Modify the MENW course to incorporate MOOTW radiological hazards (RCD: 2/99, PAO: the AFRRI).

AP1.10.4.4.6. Determine how directed energy threat, diagnosis, and

treatment training should be disseminated to designated primary care providers (RCD: 2/99, PAO: the DMRTI).

AP1.10.4.4.7. Develop tri-Service FMCBCand Field MENW courses intended for health-care support personnel to meet deployment requirements. Emphasis will be placed on casualty management prior to arrival to MTFs (e.g., decontamination, agent detection, equipment use, operation planning, NBC agent effects and characteristics, required PPE and/or MOPP, and radiation effects) (RCD: 6/99, PAO: the Army and the AFRRI).

AP1.10.4.4.8. Sustain NBC skills learned in the MMCBC and MENW course with CD ROM, VTT, VTC, or other appropriate means (RCD: 6/99, PAO: the Army and the AFRRI).

AP1.10.4.4.9. Code billets in deployable medical units (e.g., L-class ships, FH, CSH, and ATH; etc.) both active and Reserve requiring MMCBC, MENW and/or directed energy certification using the following guidance: the MMCBC, MENW, and/or directed energy training shall be required for the selected primary care physicians (i.e., emergency physicians, general medical officers, pediatricians, family practice physicians, internists), physician assistants, nurse practitioners, special forces medics, and independent duty corpsmen. MMCBC, MENW, and/or directed energy training certification for the Biomedical Sciences Corps, the Dental Corps, the Veterinary Corps, and the Nurse Corps billets shall be determined by the Services (RCD: 6/99, PAO: the Services).

AP1.10.4.4.10. Code billets in deployable medical units (e.g., L-class ships, FH, CSH, MASH, and ATH; etc.) for health-care support personnel both active and Reserve requiring the FMCBC and Field MENW courses (i.e., to track personnel readiness posture) (RCD: 6/99, PAO: the Services).

AP1.10.4.4.11. Develop a tri-Service course for selected graduates (to be identified by unit commanders) of the MMCBC, the MENW, the Field MENW or the FMCBC Courses to enable them to provide unit training and expertise for management of chemical and/or biological casualties (a train-the-trainer program) (RCD: 2/2000, PAO: the Army and the AFRRI).

AP1.10.4.4.12. Review and revise the content of the MENW course with the goal of making it less technical and more relevant for primary care providers (RCD: 7/99, PAO: the AFRRI).

AP1.10.5. Action Plan 36. Emerging Radiation Environments

AP1.10.5.1. Background

AP1.10.5.1.1. New military operational environments in the post-Cold War era demand a review of DoD medical policies, doctrine, equipment and research requirements. The military health services system must address both immediate and long-term health effects associated with operations in NBC environments. Current military doctrine for operations in a nuclear environment only provides guidance for health-care operations in peacetime and general nuclear war, but does not address MOOTW. Neither peacetime standards nor general nuclear war procedures apply under MOOTW conditions.

AP1.10.5.1.2. With the involvement of U.S. forces in MOOTW, the greatest radiation exposure risks are from radiation dispersion weapons, damaged nuclear reactors, DU munitions, and unknown radiation sources from industrial waste sites, hospital sources, and research facilities. The most probable nuclear weapon scenarios are those involving the deployment of relatively low-yield nuclear devices targeted at specific military installations or sensitive political targets. OPLANS have not considered these risks or a combination of those with DNBI.

AP1.10.5.1.3. Recent experience in ODS and Bosnia highlight the inadequacies of existing doctrine. The application of peacetime standards and DoD infrastructure proved unexpectedly difficult during the Bosnia deployment. The presence of minefields and snipers increased the risk of what would ordinarily be "safe" radiation protection practices.

AP1.10.5.1.4. The Defense Medical Program Guidance outlines the requirement to "ensure a robust clinical capability to detect, assess, and effectively manage injuries from combat or deployment related medical threats not normally encountered in peacetime health care." Neither peacetime health nor environmental standards are considered in the current framework for medical tactical or deployment operations. The Department of Defense does not have the equipment, the doctrine, nor the proper distribution of expertise to address those issues.

AP1.10.5.2. Discussion

AP1.10.5.2.1. Casualty prediction models, in particular DNBI models, do not consider the effects of sub-lethal exposure to radiation. However, there is evidence that exposure to radiation below current field OEG increases the

susceptibility to disease. Those models require modification to account for increased number and severity of casualties due to sub-lethal doses of radiation and combination of risks to include DNBI.

AP1.10.5.2.2. NATO and the United States have established OEG to provide commanders with a tool for balancing the risks of operations in a nuclear environment with operational necessity. That guidance is currently designed to protect against acute effects without considering the long-term health effects. It is implemented by assigning a RES, categories 1 through 3, to a unit based upon unit whole body, external gamma radiation exposure. That guidance ignores inhaled or ingested radioactive materials. Policies should be written to address both internal and external radiation exposures.

AP1.10.5.2.3. The OEG assumes that all persons exposed to radiation are affected equally and does not consider any differences in sensitivity to radiation between men and women. Policy guidance should be established concerning the adequacy of current OEG for women.

AP1.10.5.2.4. The GAO produced a report (GAO/NSAID-93-90 reference (z)) on DU contamination that demonstrated the deficiencies in radiation exposure modeling, health effects, treatment, contamination monitoring, internal dose assessment, and adequate training to unit level soldiers through senior leadership (See Action Plan 32 above).

AP1.10.5.3. Objective. Develop new medical policies, doctrine, equipment, and research requirements needed to conduct the full range of military operations in all radiation (ionizing and nonionizing) environments.

AP1.10.5.4. Tasks

AP1.10.5.4.1. Develop guidance for operations in a contaminated environment that will allow commanders to effectively function while accepting risks that are consistent with operational exposure guidance (RCD: 6/99, PAO: the AFRRI).

AP1.10.5.4.2. Establish policy statement regarding the adequacy of operational radiation exposure guidance levels for women in operations other than war (RCD: 6/99, PAO: the AFRRI and the OASD(HA)(HOP)).

AP1.10.5.4.3. Assess immediate and long-term health effects of exposure to DU (for men and women) (RCD: 9/2002, PAO: the AFRRI).

AP1.10.5.4.4. Develop DU treatment protocols and policies for long-term health effects monitoring (RCD: 9/2002, PAO: the Army, the AFRRI, and the OASD(HA)(HOP)).

AP1.10.5.4.5. Develop training programs for medical personnel on the treatment and risks associated with DU injuries (RCD: 9/2002, PAO: the USUHS).

AP1.10.5.4.6. Procure and sustain DU equipment sets developed to execute immediate treatment protocols (RCD: 9/2002, PAO: the Services).

AP1.10.5.4.7. Develop modified equipment sets to execute immediate treatment protocols for exposures to DU (RCD: 9/2002, PAO: the Army).

AP1.10.5.4.8. Develop data required to make predictions of effects of sub-lethal ionizing radiation exposure alone and in combination with multiple insults (e.g., infectious agents and injuries) (RCD: 9/2003, PAO: the AFRRI and the Army).

AP1.10.5.4.9. Incorporate data regarding the effects of sub-lethal ionizing radiation exposure alone and in combination with multiple insults (e.g., infectious agents and injuries) into casualty prediction models (RCD: 9/2003, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.10.5.4.10. Write a policy that provides field criteria for performing assessments of internal doses of radiation (RCD: 9/2003, PAO: the Army).

AP1.10.5.4.11. Identify the force structure (personnel and equipment) required to implement the doctrine for internal radiation exposures during military operations (from peacekeeping to high-intensity combat) for military operations (RCD: 9/2003, PAO: the Services).

AP1.11. R&D

AP1.11.1. Action Plan 37. Military Biomedical R&D Needs Integration Process.

AP1.11.1.1. Background. In order to effectively manage the DoD biomedical investment account, an effective and responsive linkage of the biomedical R&D-related military operational needs to the R&D execution is necessary. With resources constrained and manpower diminishing, operational needs must be integrated across the Services. That will ensure that programs will address highest operational

needs for biomedical R&D on a defense-wide basis and be well focused.

AP1.11.1.2. Discussion

AP1.11.1.2.1. Currently, there is no organization and/or decision maker that is empowered to collect, analyze, evaluate, and prioritize all biomedical R&D-related military operational needs and synchronize with the Service POMs. Presently, the Services develop their needs independently and do not coordinate an overall Plan to achieve a DoD-wide medical readiness strategy. In addition, there is no formalized procedure to include ASD(HA), the Chairman of the Joint Chiefs of Staff, or other emerging needs. There is no centralized collection mechanism and, thus, no way to integrate needs of all stakeholders or achieve an overarching prioritization to allow the best investment in the DoD biomedical R&D program.

AP1.11.1.2.2. It is envisioned that the DoD ASBREM Committee will continue in the role of a "biomedical R&D" oversight and management body capable of influencing planning, programing, budgeting and execution decisions. In order to execute that mission, the ASBREM Committee will require a consolidated, prioritized list of biomedical R&D-related military operational needs representing the medical readiness needs of the Department of Defense and incorporating non-medical considerations. The ASBREM also will require analyses of the executability of proposed and ongoing R&D programs. It is proposed that the Secretary of Defense expand the role of the ASBREM Committee and authorize the Committee to establish a subordinate body empowered with mission responsibilities sufficient to meet ASBREM's expanded mission.

AP1.11.1.3. Objective. Establish a capability to collect, review, integrate and prioritize the DoD biomedical R&D-related military operational needs in order to deliver a DoD-wide coordinated needs list annually to support intelligent allocation of biomedical R&D resources.

AP1.11.1.4. Tasks

AP1.11.1.4.1. Draft and obtain approval for a new charter for the ASBREM Committee authorizing the establishment of a biomedical needs integration subcommittee (RCD: 2/99, PAO: the DDR&E and the OASD(HA)(HOP)).

AP1.11.1.4.2. Establish a standing subcommittee within the new ASBREM Committee empowered to collect, integrate and prioritize biomedical R&D-related military operational needs for approval by the ASBREM Committee.

Membership should include the Services, the Chairman of the Joint Chiefs of Staff, the OASD(HA) (RCD: 2/99, PAO: the DDR&E and the OASD(HA)(HOP)).

AP1.11.1.4.3. Publish a complete, prioritized list of biomedical R&D-related military operational needs and update annually thereafter (RCD: 4/99, PAO: the New ASBREM Needs Integration Subcommittee).

AP1.11.2. Action Plan 38. Execution of Military Biomedical R&D.

AP1.11.2.1. Background. The military biomedical R&D program is currently conducted in Service- or OSD-managed laboratories and associated activities. Those organizations provide the Department of Defense with the state-of-the-art capabilities needed to meet a large segment of operational, environmental, or occupational threats. Oversight of the military biomedical R&D program is through the ASBREM. In 1996, the Department of Defense conducted extensive preliminary planning for the establishment of the AFMRDA.

AP1.11.2.2. Discussion

AP1.11.2.2.1. The purpose of this Action Plan is to ensure that the biomedical R&D program is coordinated, integrated, and executed to meet joint and Service needs to provide warfighter operational support. As the Department of Defense downsizes, it is essential that efforts be directed toward maintenance of a core capability to prevent technological surprise and produce and/or acquire required medical products, and toward sustainment of a scientific expertise in the Department of Defense. To continue to attract and retain world-class scientists, it is critical to create a stable funding and staffing environment.

AP1.11.2.2.2. The establishment of an AFMRDA would provide an opportunity to significantly improve the coordination of biomedical R&D efforts. Such an Agency could maximize efficiencies through the establishment of common management and operational processes such as, common metrics for laboratory performance and standardized information management systems.

AP1.11.2.2.3. The culmination of the biomedical R&D program is the fielding of the results of R&D efforts, e.g., information and products, to operational elements. Currently, a need exists to establish a mechanism to enhance training of the operational forces in the proper use of new R&D products. A policy needs to be developed for operational use of products that do not have full FDA licensure to ensure that all operational needs are met in a timely, efficient manner. Also, a seamless

system is needed to incorporate information-based products such as treatment protocols, physiological tables, medical surveillance data, and exposure limits into the Services' and joint training and doctrine. Further, the functional sponsor of biomedical R&D-related military operational needs must be involved throughout the R&D cycle to ensure that the fielded products meet customer needs.

AP1.11.2.2.4. The military materiel development process needs to react more quickly to counter changing threats while keeping focus on related health issues. The GAO/NSAID-93-90 report (reference (z)), highlights that issue. Soldiers were wounded with DU munitions and the medical departments were unprepared to treat those injuries. It is important to ensure that a medical review or health risk analysis is conducted for all military systems and that, when appropriate, a biomedical R&D effort is initiated to resolve those health issues.

AP1.11.2.3. Objective. Ensure that the military biomedical R&D program is coordinated, integrated, and executed to meet joint and Service operational needs to provide operational support to the warfighter.

AP1.11.2.4. Tasks

AP1.11.2.4.1. Establish a tri-Service organization to manage all biomedical R&D efforts (RCD: 2/99, PAO: the Services).

AP1.11.2.4.2. Establish a mechanism to ensure the involvement of the functional sponsor throughout the R&D cycle (basic research through implementation of research results) (RCD: 4/99, PAO: the ASBREM).

AP1.11.2.4.3. Expedite fielding of IND products through well defined policies and procedures to include medical records and informed consent (RCD: 6/99, PAO: theOASD(HA)(C&PP)).

AP1.11.2.4.4. The Service SGs provide to the TRC an annual "Medical Readiness critical acquisition billet report" which demonstrates compliance with the "Defense Acquisition Workforce Improvement Act" (10 U.S.C., reference (bb)) and justify or provide rationale for shortfalls or changes (RCD: 4/99, PAO: the Services).

AP1.11.2.4.5. Using the 733 Update Study, the Service SGs provide to the TRC an annual "Medical Readiness R&D Scientists" report that identifies what billets are filled and to justify or provide rationale for shortfalls or changes (RCD: 4/99, PAO: the Services).

AP1.11.2.4.6. Establish a mechanism to enhance training of the operational forces in use of new biomedical R&D products (RCD: 6/99, PAO: the DMRTI and the Services).

AP1.11.2.4.7. Develop a Plan to ensure joint application of all R&D projects, when appropriate (RCD: 2/99, PAO: the ASBREM).

AP1.11.2.4.8. Develop a system to incorporate information based products (e.g., treatment protocols, physiological tables, medical surveillance data, exposure limits; etc.) into the Services' and joint training and doctrine (RCD: 6/99, PAO: the Chairman of the Joint Chiefs of Staff and the Services).

AP1.11.2.4.9. Develop processes that ensure ongoing coordination among functional research areas (RCD: 2/99, PAO: the ASBREM).

AP1.11.2.4.10. Develop a tri-Service plan that promotes leveraging and cross-utilization of DoD and COTS assets (RCD: 2/99, PAO: the ASBREM).

AP1.11.2.4.11. Develop common metrics for laboratory performance; e.g., overhead cost, scientific productivity, and managerial efficiency (RCD: 10/99, PAO: the ASBREM).

AP1.11.2.4.12. Standardize the data architecture and information management systems among labs to enhance communication and coordination (RCD: 10/2001, PAO: the TMA(IMT&R) and the Services).

AP1.11.2.4.13. Develop procedures that ensure that R&D research managers know and utilize non-DoD research; e.g., civilian, Federal and international (RCD: 2/99, PAO: the ASBREM).

AP1.11.2.4.14. Examine the development process for new military systems (e.g., weapons, lasers, sonar, and microwaves) to identify health issues related to deployment of those systems and to determine if a biomedical R&D effort is required (RCD: 6/99, PAO: the Services).

AP1.12. PM

AP1.12.1. Action Plan 39. Force Health Surveillance.

AP1.12.1.1. Background. Decision-makers require population-based information to make critical operational and policy decisions. Health information systems must provide prompt and easy collection, analysis, and reporting of population based health information. With the advent of TRICARE and the increased number of military deployments over the past several years, there is an ever increasing need for continuous, accurate, real-time epidemiological assessment of the health status of U.S. military force, active and Reserve, and U.S. beneficiary populations.

AP1.12.1.2. Discussion

AP1.12.1.2.1. Current health information systems and those under development have a primary focus on individual patient care. Additionally, current medical data collection requires labor intensive methods to relate and manipulate data elements, such as "hands-on" reviews of medical records. While those systems may adequately meet the needs of clinical health care services, they do not meet requirements for performing necessary population-based data collection and analysis.

AP1.12.1.2.2. Existing systems must also be linked to permit comprehensive epidemiological analysis; capabilities to link exposure and/or outcome data to personnel data must be developed. Additionally, a system must be developed to ensure that health data can be tracked longitudinally throughout the Service career of military personnel so that potential sources of adverse health effects (such as exposures related to specific deployments or occupational hazards) can be identified. Accordingly, it is critical that PM input shall be included early in the development of all new health information systems.

AP1.12.1.2.3. Additionally, a capability must be developed to provide comprehensive reporting of unit health status to all commanders on a periodic basis; currently, U.S. military leaders are being forced to make critical prevention and health care decisions today without the necessary supporting epidemiological data. Prompt correction of those deficiencies is critical; our military leadership must have sound health data to make accurate operational and policy decisions.

AP1.12.1.3. Objective. Develop the capability to continuously assess total force health and fitness to provide military leaders with fact-based tools for decision making.

AP1.12.1.4. Tasks

AP1.12.1.4.1. Establish a process to include PM input into the

functional requirements, development, and testing stages of all new health information systems and the modification of existing systems (RCD: 7/99, PAO: the TMA(IMT&R) and the JPMPG).

AP1.12.1.4.2. Program resources needed to conduct epidemiological data collection, analysis, and reporting (RCD: 7/99, PAO: the Services).

AP1.12.1.4.3. Define core data elements for health surveillance that should be standardized across the Services and the TRICARE MCS contract networks (RCD: 7/99, PAO: the AFEB and the TMA(IMT&R)).

AP1.12.1.4.4. Determine requirements for epidemiological data collection and analysis for development of a force health surveillance system for gathering, analyzing, and disseminating population-based health information during peacetime and contingencies (RCD: 7/99, PAO: the OASD(HA)(HOP)).

AP1.12.1.4.5. Incorporate all identified requirements into the development and integration of new or modified health and personnel information systems, to include the ambulatory data system, immunization tracking system, communicable disease reporting systems, etc. using DoD/MHS data standards and architecture (RCD: 12/2002, PAO: the TMA(IMT&R)).

AP1.12.1.4.6. Assess and deploy existing software and, if necessary, develop software to support both aggregate and individual disease data collection, analysis, and reporting in the field (RCD: 12/99, PAO: the TMA(IMT&R), the CHCS II PMO, and the CEIS PMO).

AP1.12.1.4.7. Establish a tri-Service data analysis and reporting center for assessing and reporting total force health status (RCD: 7/99, PAO: the TMA(MA&HP)).

AP1.12.1.4.8. Establish a tri-Service longitudinal database for all Service personnel that links with non-DoD databases and includes environmental and/or occupational exposure data, personnel data, intervention data (e.g., immunizations), and health outcome data (RCD: 12/2003, PAO: the TMA(IMT&R)).

AP1.12.1.4.9. Identify and prioritize DoD health-related questions requiring epidemiological analysis (RCD: 12/99, PAO: the OASD(HA)(C&PP)).

AP1.12.1.4.10. Develop a process for collection and analysis of joint deployment surveillance data from the Combatant Commands to forward to the

Chairman of the Joint Chiefs of Staff for actions required to minimize preventable disease and injuries (RCD: 12/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.12.1.4.11. Review and modify DNBI reporting categories to more accurately reflect disease incidence in deployed populations (RCD: 7/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.12.2. Action Plan 40. Measuring Effectiveness and Performance.

AP1.12.2.1. Background. A wide array of prevention programs and interventions are employed within the Department of Defense to maximize combat effectiveness and reduce disease, injury, and death. Lack of formal program evaluation for prevention and other health programs may result in inappropriate use of health resources and have a negative impact on force readiness. Standardized risk and/or benefit, cost and/or benefit, and cost-effectiveness analyses are essential for determining the feasibility and effectiveness of prevention activities.

AP1.12.2.2. Discussion

AP1.12.2.2.1. Although formal tools exist for measuring effectiveness of PM programs, those are frequently not incorporated into the design or planning of such programs. There is also no consistent Service-wide or tri-Service effort to use standardized measurement criteria based on nationally recognized standards and best practices. Without consistently implemented and well designed mechanisms to measure effectiveness, the Department of Defense cannot properly evaluate prevention programs.

AP1.12.2.2.2. Standardized risk and/or benefit, cost and/or benefit, and cost effectiveness analyses must be applied to every proposed DoD prevention program or intervention prior to implementation and to every currently existing program. It is also important to develop specific, measurable process and outcome criteria for every new and existing prevention program. If done correctly, that will help in determining if program objectives are met. Evaluation criteria and methodologies should be standardized throughout the Department of Defense using nationally accepted models to allow comparison between programs. Only through active and consistent program evaluation can the Department of Defense determine whether or not prevention programs are cost effective and improve health and readiness.

AP1.12.2.3. Objective. Identify or develop appropriate, standardized MOEs

and MOPs for DoD prevention programs.

AP1.12.2.4. Tasks

AP1.12.2.4.1. Identify standardized methodologies, using U.S.-accepted models, for measuring prevention program feasibility and effectiveness (RCD: 12/99, PAO: the TMA(MA&HP) and the Services).

AP1.12.2.4.2. Identify appropriate measures of performance and effectiveness for evaluating total force pre-, during, and post-deployment prevention activities (RCD: 7/99, PAO: the JPMPG and the AFEB).

AP1.12.2.4.3. Formally evaluate all proposed and existing prevention programs or interventions (RCD: 6/2003, PAO: the TMA(MA&HP) and the Services).

AP1.12.2.4.4. Develop a prioritization plan describing use of scarce preventive medicine resources by Services in support of Combatant Commands (RCD: 10/2000, PAO: the Services and the Chairman of the Joint Chiefs of Staff).

AP1.12.3. Action Plan 41. Medical Intelligence.

AP1.12.3.1. Background. The concept of collecting medical intelligence was initiated by the War Department during 1940 when the Army SG was asked to provide information on health and sanitation. Since that time, the field of medical intelligence has grown to include foreign military and civilian health care delivery capabilities and trends, global infectious disease and environmental health risks, life science technologies, and foreign bio-technologies of military significance. The Defense Intelligence Agency's AFMIC is the DoD sole source of comprehensive overseas intelligence in the medical functional area. As an "all source" intelligence Agency, the AFMIC staff shall have access to classified sources unavailable to other medical Agencies. Medical intelligence analyses are critical to successfully understanding and countering the spectrum of health threats.

AP1.12.3.2. Discussion

AP1.12.3.2.1. With changing roles and missions, force downsizing, and the shrinking forward presence of U.S. military power, the need for medical intelligence support to operational forces and policy makers is growing. Operational forces are now deploying to immature theaters of operation, on short notice, with minimal supplies. That makes knowledge of the host country’s military and civilian medical

infrastructure and/or capabilities critical to effective planning. Globally emerging diseases and environmental health hazards, terrorist threats, and deteriorating third-world health infrastructures now are major health risk factors. Additionally, medical technologies and/or capabilities are changing extremely rapidly. Accurate, timely health risk and foreign capabilities assessments are critical for DoD health policy and planning.

AP1.12.3.2.2. Despite changing military roles, many medical intelligence products are designed primarily to support conventional military deployments. Additionally, medical intelligence is often not included in contingency planning and/or execution and when deployments occur, field medical information is rarely forwarded to the AFMIC, or other appropriate Agencies, in a timely manner to validate and/or update intelligence estimates.

AP1.12.3.3. Objective. Provide comprehensive, accurate, timely medical information and intelligence addressing the full spectrum of anticipated contingencies.

AP1.12.3.4. Tasks

AP1.12.3.4.1. Review and update JOPES guidance to ensure that appropriate medical intelligence is included in contingency planning and execution documents (RCD: 6/2000, PAO: the Chairman of the Joint Chiefs of Staff).

AP1.12.3.4.2. Review and/or update and/or develop joint requirements for medical intelligence products to ensure that they meet consumer needs, addressing the full spectrum of anticipated contingencies and including all required information (RCD: 12/99, PAO: the Chairman of the Joint Chiefs of Staff and the Services).

AP1.12.3.4.3. Task the Combatant Commands and the Services to ensure that all pertinent overseas field medical information for validating and/or updating medical intelligence databases is forwarded to the AFMIC in a timely manner (RCD: 6/99, PAO: the Chairman of the Joint Chiefs of Staff).

AP2. APPENDIX 2

PAO ASSIGNMENTS

Primary Action Offices	**Task Assignments**
The DDR&E	AP1.11.1.4.1., AP1.11.1.4.2.
The OASD(HOP)	AP1.1.1.4.1., AP1.1.1.4.2., AP1.4.2.4.2., AP1.5.2.4.2., AP1.5.2.4.3., AP1.7.1.4.1., AP1.9.1.4.2., AP1.10.1.4.1., AP1.10.3.4.3., AP1.10.5.4.2., AP1.10.5.4.4., AP1.11.1.4.1., AP1.11.1.4.2., AP1.12.1.4.4.
The TMA(MHSO)	AP1.7.1.4.6.
The TMIP PMO	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3., AP1.3.1.4.4., AP1.3.1.4.6., AP1.3.1.4.7., AP1.3.2.4.1., AP1.3.2.4.2., AP1.3.2.4.3., AP1.3.2.4.4., AP1.3.2.4.5., AP1.3.3.4.1., AP1.3.3.4.2., AP1.3.3.4.4., AP1.8.4.4.5.
The TMA(IMT&R)	AP1.3.3.4.2., AP1.3.3.4.3., AP1.3.3.4.5., AP1.4.2.4.5, AP1.4.3.4.3, AP1.7.1.4.2., AP1.8.1.4.2., AP1.8.1.4.5., AP1.8.1.4.11., AP1.8.1.4.12., AP1.8.1.4.13., AP1.8.4.4.5., AP1.10.1.4.1., AP1.10.3.4.1., AP1.11.2.4.12, AP1.12.1.4.1., AP1.12.1.4.3., AP1.12.1.4.5., AP1.12.1.4.6., AP1.12.1.4.8.
The OASD(HA)(C&PP)	AP1.6.1.4.5., AP1.6.2.4.1., AP1.11.2.4.3., AP1.12.1.4.9.
The OASD(HA)(HB&FP)	AP1.8.1.4.3.
The Chairman of the Joint Chiefs of Staff	AP1.1.1.4.1., AP1.1.1.4.2., AP1.1.1.4.3., AP1.1.1.4.4., AP1.1.1.4.5., AP1.1.2.4.1., AP1.1.2.4.2., AP1.4.3.4.2., AP1.4.4.4.6., AP1.5.1.4.1., AP1.5.3.4.3., AP1.5.4.4.2., AP1.7.3.4.3., AP1.7.4.4.1, AP1.7.4.4.3., AP1.10.2.4.1., AP1.10.2.4.6., AP1.10.3.4.4., AP1.10.4.4.3., AP1.10.5.4.9., AP1.11.2.4.8., AP1.12.1.4.10, AP1.12.1.4.11, AP1.12.2.4.4., AP1.12.3.4.1., AP1.12.3.4.2., AP1.12.3.4.3.
The USTRANSCOM	AP1.4.4.4.2., AP1.4.4.4.3., AP1.4.4.4.12., AP1.5.1.4.3., AP1.5.2.4.4., AP1.5.3.4.1., AP1.5.3.4.2., AP1.5.4.4.1., AP1.5.5.4.2., AP1.5.5.4.4., AP1.9.1.4.1.
The Combatant Commands	AP1.4.4.4.5., AP1.10.1.4.2., AP1.10.2.4.2.
The USACOM	AP1.5.2.4.1., AP1.7.4.4.4., AP1.9.1.4.1.
The Services	AP1.1.2.4.1., AP1.2.1.4.2., AP1.2.2.4.2., AP1.3.1.4.2., AP1.3.1.4.3., AP1.3.1.4.5., AP1.3.2.4.5., AP1.3.3.4.4., AP1.4.1.4.5., AP1.4.1.4.9., AP1.4.2.4.1., AP1.4.2.4.3., AP1.4.2.4.7., AP1.4.3.4.1., AP1.4.3.4.4., AP1.4.4.4.3., AP1.4.5.4.2., AP1.4.5.4.3., AP1.4.5.4.5., AP1.5.1.4.2., AP1.5.1.4.3., AP1.5.4.4.3., AP1.6.1.4.1., AP1.6.1.4.2., AP1.6.1.4.3., AP1.6.1.4.4., AP1.6.2.4.2., AP1.6.2.4.4.,AP1.7.1.4.3., AP1.7.3.4.4., AP1.7.3.4.5., AP1.7.4.4.2., AP1.8.1.4.1., AP1.8.1.4.9., AP1.8.1.4.10., AP1.8.2.4., AP1.8.3.4.1., AP1.8.3.4.2., AP1.8.4.4.1., AP1.8.4.4.2., AP1.8.5.4.4., AP1.10.1.4.1., AP1.10.1.4.3., AP1.10.1.4.5., AP1.10.1.4.6., AP1.10.1.4.7., AP1.10.2.4.1., AP1.10.2.4.2., AP1.10.2.4.5., AP1.10.2.4.6., AP1.10.3.4.3., AP1.10.3.4.4, AP1.10.3.4.5., AP1.10.3.4.6., AP1.10.3.4.7., AP1.10.4.4.1.,AP1.10.4.4.2., AP1.10.4.4.4., AP1.10.4.4.9., AP1.10.4.4.10., AP1.10.5.4.9., AP1.10.5.4.11., AP1.11.2.4.1., AP1.11.2.4.4., AP1.11.2.4.5., AP1.11.2.4.6., AP1.11.2.4.8., AP1.11.2.4.12., AP1.11.2.4.14., AP1.12.1.4.2., AP1.12.1.4.7., AP1.12.2.4.1., AP1.12.2.4.3., AP1.12.2.4.4., AP1.12.3.4.2.
Navy – Specific	AP1.4.2.4.6., AP1.8.5.4.1., AP1.8.5.4.2., AP1.8.5.4.3., AP1.8.5.4.5., AP1.8.5.4.6., AP1.8.5.4.7., AP1.8.5.4.9.

Primary Action Offices	Task Assignments
Army – Specific	AP1.4.5.4.1., AP1.5.5.4.1., AP1.5.5.4.3., AP1.7.3.4.1., AP1.8.4.4.6., AP1.8.5.4.1., AP1.8.5.4.2., AP1.8.5.4.3., AP1.8.5.4.5., AP1.8.5.4.6., AP1.8.5.4.7., AP1.8.5.4.9., AP1.10.1.4.4., AP1.10.1.4.9., AP1.10.3.4.8., AP1.10.4.4.4., AP1.10.4.4.7., AP1.10.4.4.8., AP1.10.4.4.11., AP1.10.5.4.4., AP1.10.5.4.7., AP1.10.5.4.8., AP1.10.5.4.10.
Air Force – Specific	AP1.5.5.4.3., AP1.10.2.4.4.
The DLA	AP1.4.1.4.5., AP1.4.1.4.6., AP1.4.1.4.10, AP1.4.4.4.10.
The AFMIC	AP1.10.1.4.8., AP1.10.3.4.2.
The USUHS	AP1.10.5.4.5.
The ASBPO	AP1.8.1.4.4., AP1.8.1.4.6., AP1.8.1.4.7., AP1.8.1.4.8., AP1.8.2.4., AP1.8.4.4.3., AP1.8.5.4.8.
The DMSB	AP1.2.1.4.1., AP1.2.1.4.3., AP1.2.2.4.1., AP1.2.3.4.1., AP1.2.3.4.2., AP1.4.1.4.6., AP1.4.2.4.4., AP1.4.2.4.5., AP1.4.2.4.7., AP1.4.4.4.7., AP1.4.5.4.1., AP1.4.5.4.2., AP1.4.5.4.3., AP1.8.4.4.4.
The AFRRI	AP1.10.2.4.3., AP1.10.4.4.5., AP1.10.4.4.7., AP1.10.4.4.8., AP1.10.4.4.11., AP1.10.4.4.12., AP1.10.5.4.1., AP1.10.5.4.2., AP1.10.5.4.3., AP1.10.5.4.4., AP1.10.5.4.8.
The ASBREM (The OASD(HA)(HOP))	AP1.11.1.4.3., AP1.11.2.4.2., AP1.11.2.4.7., AP1.11.2.4.9., AP1.11.2.4.10., AP1.11.2.4.11., AP1.11.2.4.13.
The AFEB	AP1.12.1.4.3., AP1.12.2.4.2.
The DMRTEC (The OASD(HA)(HOP))	AP1.7.1.4.3.
The DMRTI	AP1.7.1.4.5., AP1.7.2.4., AP1.7.3.4.2., AP1.10.4.4.6., AP1.11.2.4.6.
The JPMPG (The Chairman of the Joint Chiefs of Staff)	AP1.12.1.4.1., AP1.12.2.4.2.
The IMLG	AP1.4.1.4.1., AP1.4.1.4.2., AP1.4.1.4.3., AP1.4.1.4.4., AP1.4.1.4.8., AP1.4.1.4.10., AP1.4.4.4.1., AP1.4.4.4.2., AP1.4.4.4.8., AP1.4.4.4.9., AP1.4.4.4.11.
The DMLSS PMO	AP1.4.1.4.7.
The TRAC^{2}ES PMO	AP1.4.4.4.4., AP1.4.5.4.4.
The HSRS PMO	AP1.7.1.4.2.
The CHCS II PMO	AP1.8.1.4.2., AP1.8.1.4.5., AP1.8.1.4.11., AP1.8.1.4.12., AP1.8.1.4.13., AP1.10.1.4.1., AP1.10.3.4.1., AP1.12.1.4.6., AP1.12.1.4.8.
The CEIS PMO	AP1.10.3.4.1., AP1.12.1.4.6., AP1.12.1.4.8.
The TMA(MA&HP)	AP1.12.1.4.7., AP1.12.2.4.1, AP1.12.2.4.3.

AP3. APPENDIX 3

IMPLEMENTATION PLAN FORMAT

AP3.1. IMPLEMENTATION PLAN DESCRIPTION

An Implementation Plan consists of one or more actions that will be taken to complete a task. Each action is listed in the form of a milestone.

AP3.2. MILESTONE DESCRIPTION.

Each milestone shall contain the following information.

AP3.2.1. Task number

AP3.2.2. Task description

AP3.2.3. PAO

AP3.2.4. Milestone description

AP3.2.5. Projected Milestone completion date

AP3.2.6. Funding. Funding shall be listed as "funding not required," "unfunded," "partially funded," or "fully funded."

AP3.2.7. Funding explanation. A funding explanation shall be provided for milestones that are listed as "unfunded" or "partially funded."

AP3.2.8. Comments

AP3.3. ELECTRONIC IMPLEMENTATION PLAN MAINTENANCE

The OASD(HA) maintains an internet site with an Implementation Plan database. All Implementation Plan Milestones will be entered into the Implementation Plan database and maintained through the internet. To receive permissions to view, add, and/or maintain information contained in the database contact the OASD(HA)(HOP) at (703) 697-8233 or DSN 227-8233.

AP4. APPENDIX 4

DEPENDENCY RELATIONSHIPS

AP4.1. PLANNING

Task Number	Task Description	Depends on
AP1.1.1.4.1.	Create a joint medical planning tool to do requirements and capabilities based planning. That tool should be approved for planning and programming.	AP1.1.1.4.3., AP1.1.1.4.2., AP1.2.1.4.2., AP1.2.1.4.3., AP1.2.3.4.1., AP1.2.3.4.2., AP1.8.5.4.3.,AP1.10.5.4.9.
AP1.1.1.4.2.	Develop a process to continuously refine and maintain the approved joint medical planning tool.	AP1.1.1.4.3.
AP1.1.1.4.3.	Establish a process to ensure communication between users, modelers, and factor developers during development of medical planning tools.	
AP1.1.1.4.4.	Define a process to standardize and integrate the development of planning factors to support existing and future planning tools.	AP1.1.1.4.3.
AP1.1.1.4.5.	Develop a medical reference Web Site that provides existing medical Joint Pubs, JTTPs, and other reference materials.	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3.
AP1.1.2.4.1.	Identify prerequisite training and experience requirements for operational planning billets.	AP1.3.1.4.5.
AP1.1.2.4.2.	Establish continuing joint education and refresher training for medical planners, and other medical department personnel.	AP1.1.2.4.1., AP1.3.1.4.5.

AP4.2. REQUIREMENTS, CAPABILITIES, AND ASSESSMENT

Task Number	Task Description	Depends on
AP1.2.1.4.1.	Develop a comprehensive, Y2K compliant, clinical database to support planning and programming.	AP1.12.1.4.1., AP1.12.1.4.4.
AP1.2.1.4.2.	Develop standardized planning factors across the continuum of care, to cover the full spectrum of operations including guidelines for application.	AP1.1.1.4.2., AP1.1.1.4.3., AP1.2.1.4.1., AP1.8.4.4.3., AP1.8.5.4.3., AP1.10.5.4.8.
AP1.2.1.4.3.	Develop a process for continual review and validation of the clinical database and all planning factors.	AP1.1.1.4.3., AP1.12.1.4.4., AP1.12.1.4.5., AP1.12.3.4.1.
AP1.2.2.4.1.	Develop a process to ensure medical coordination during the development of wargaming models.	
AP1.2.2.4.2.	Incorporate realistic medical scenarios into wargaming models.	AP1.2.1.4.2., AP1.2.1.4.3.
AP1.2.3.4.1.	Add new PC codes and "task, time, treater," data for ICD-9 codes of military significance.	
AP1.2.3.4.2.	Develop standardized definitions for admissions and presentations.	

AP4.3. C4IM

Task Number	Task Description	Depends on
AP1.3.1.4.1.	Gather medical service and Combatant Command telecommunications requirements (e.g. operational requirements, system constraints, and interface requirements) to ensure interoperability.	AP1.3.3.4.3., AP1.4.3.4.1., AP1.4.3.4.2., AP1.4.3.4.3., AP1.4.4.4.2., AP1.4.4.4.4., AP1.4.4.4.9.,AP1.4.4.4.10., AP1.10.3.4.1., AP1.12.1.4.1., AP1.4.3.4.4.
AP1.3.1.4.2.	Validate requirements with joint and Service organizations and coordinate with the DISA and the Chairman of the Joint Chiefs of Staff J-6.	AP1.3.1.4.1.
AP1.3.1.4.3.	Incorporate Service and joint medical requirements as applicable, into the line infrastructure.	AP1.3.1.4.2.
AP1.3.1.4.4.	Develop the global communications architecture and a life-cycle acquisition strategy to integrate into the line community's communication capability that is in compliance with Joint Technical Architecture, the DII COE, and the C4ISR Architecture Framework.	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3., AP1.3.3.4.1., AP1.4.3.4.1.
AP1.3.1.4.5.	Define and implement training for joint medical communications operations and unit level communications operations.	
AP1.3.1.4.6.	Establish a process to update Service and Combatant Command medical communications requirements baselines at a minimum of 24 months.	
AP1.3.1.4.7.	Establish a process and conduct ongoing COEA of medical communication capabilities to substantiate the operational return on investment during contingency operations.	AP1.3.1.4.4.
AP1.3.2.4.1.	Define medical situational awareness functional requirements.	AP1.3.3.4.1.
AP1.3.2.4.2.	Perform market survey to evaluate GOTS and COTS alternatives.	AP1.3.2.4.1.
AP1.3.2.4.3.	Design and prototype a joint medical situational awareness system based on functional requirements.	AP1.3.2.4.2.
AP1.3.2.4.4.	Conduct operational test and evaluation.	AP1.3.2.4.3.
AP1.3.2.4.5.	Field system.	AP1.3.2.4.4.
AP1.3.2.4.6.	Identify and coordinate medical data standardization with SHADE direction.	
AP1.3.3.4.1.	Adequately resource TMIP requirements in the FYDP.	
AP1.3.3.4.2.	Define the essential subset of the CPR, which is required for medical support of contingency operations.	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3.
AP1.3.3.4.3.	Develop a joint security classification guide for medical information to ensure that all the Services comply with information integrity, patient privacy and Geneva Convention implications.	

Task Number	Task Description	Depends on
AP1.3.3.4.4.	Field a PIC to provide on demand access to dynamic individual personnel and medical information.	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3., AP1.3.3.4.2., AP1.6.2.4.1., AP1.6.2.4.3.
AP1.3.3.4.5.	Develop a record for use in MOOTW (e.g., track refugees and disaster victims; etc.) compatible with DHHS and WHO.	AP1.3.3.4.2.

AP4.4. LOGISTICS

Task Number	Task Description	Depends on
AP1.4.1.4.1.	Develop a Plan to source full basic load and surge requirements for early deploying units, forward-deployed units, and any WR requirements prepositioned in the theater.	AP1.1.1.4.1., AP1.4.1.4.4., AP1.4.1.4.6., AP1.4.1.4.7., AP1.2.1.4.1., AP1.2.1.4.2., AP1.10.2.4.5.,AP1.10.1.4.8.
AP1.4.1.4.2.	Develop a Plan to source the basic load and surge requirements for early deploying forces.	AP1.4.1.4.4., AP1.4.1.4.6., AP1.4.1.4.7., AP1.10.2.4.5.
AP1.4.1.4.3.	Develop a Plan to source sustainment for deployed forces.	AP1.4.1.4.4., AP1.4.1.4.6., AP1.4.1.4.7.
AP1.4.1.4.4.	Integrate IPP process outcomes into medical logistics business practices.	
AP1.4.1.4.5.	Test and evaluate the sourcing plans described in tasks AP1.4.1.4.1, AP1.4.1.4.2, and AP1.4.1.4.3.above.	AP1.4.1.4.1., AP1.4.1.4.2., AP1.4.1.4.3.
AP1.4.1.4.6.	Achieve a minimum of 80 percent NSN and/or Commercial numbering cross-reference capability.	
AP1.4.1.4.7.	Develop a requisition system to provide automatic substitution for ordered items that is transparent to the ordering activity.	AP1.4.1.4.6.
AP1.4.1.4.8.	Develop a methodology for disposal of hazardous, outdated, or excess medical materiel while deployed or prior to re-deployment.	
AP1.4.1.4.9.	Develop a Plan to meet the surge and sustainment needs of the Services' requirements with 100 percent availability of materiel for planned and unplanned requirements.	
AP1.4.1.4.10.	Develop a methodology for prioritization of competing medical materiel demands.	
AP1.4.2.4.1.	Develop improved deployable, mobile, modular, tailorable medical capabilities while reducing the weight and cube.	AP1.1.1.4.1., AP1.2.1.4.1., AP1.2.1.4.2., AP1.2.1.4.3., AP1.2.3.4.1., AP1.11.1.4.3.
AP1.4.2.4.2.	Establish a policy to require continuous assessment of assemblage status and rebuild and/or refurbish every 5 years; modernize as required.	
AP1.4.2.4.3.	Develop retrograde and reconstitution plans.	
AP1.4.2.4.4.	Jointly develop augmentation sets that can be applied to DEPMEDS and non-hospital medical assemblages to support MOOTW.	AP1.1.1.4.1., AP1.2.1.4.1., AP1.2.1.4.2., AP1.2.1.4.3., AP1.2.3.4.1., AP1.4.2.4.5.
AP1.4.2.4.5.	Develop a capability to monitor peacetime medical materiel consumption and use the information to standardize and modernize medical assemblages.	
AP1.4.2.4.6.	Integrate the hospital ships and the CRTS platforms into the DEPMEDS standardization process.	
AP1.4.2.4.7.	Integrate peacetime and wartime standardization processes.	
AP1.4.3.4.1.	Develop satellite communications and bandwidth requirements for health services logistics support. Coordinate with the respective C4I activities to ensure these requirements are identified and supported in OPLANs and budget submissions.	

Task Number	Task Description	Depends on
AP1.4.3.4.2.	Incorporate logistics communications procedures in the medical annexes to all current OPLANs and contingency plans.	AP1.4.3.4.1.
AP1.4.3.4.3.	Resource, develop, and field DMLSS (a long-term single medical logistics information management support system with world-wide and local user communications systems).	AP1.3.1.4.4., AP1.4.1.4.7.
AP1.4.3.4.4.	Field DMLSS to deployable medical units.	AP1.4.3.4.3.
AP1.4.4.4.1.	Determine joint operational requirements and roles for medical logistics management.	AP1.4.4.4.5.
AP1.4.4.4.2.	Develop a detailed Plan to manage the flow of medical materiel (Factory to Foxhole) during contingency operations (e.g. AE CRAF).	AP1.4.5.4.2., AP1.3.1.4.4.
AP1.4.4.4.3.	Test the transportation management Plan developed for transporting medical materiel during contingency operations.	AP1.5.5.4.4., AP1.4.4.4.2.
AP1.4.4.4.4.	Develop interfaces with distribution and transportation planning and control systems to provide in-transit visibility.	AP1.3.1.4.2., AP1.4.3.4.3., AP1.4.3.4.4.
AP1.4.4.4.5.	Analyze OPLANs and prepare joint medical logistics input.	AP1.1.2.4.1., AP1.1.2.4.2.
AP1.4.4.4.6.	Develop plans for including joint-medical logistics support in joint exercises.	AP1.4.4.4.5., AP1.4.4.4.1.
AP1.4.4.4.7.	Incorporate a standardized list of critical equipment items into the D-Day Significant Item List.	AP1.2.1.4.1., AP1.2.1.4.2., AP1.2.1.4.3., AP1.2.3.4.1., AP1.4.2.4.5.
AP1.4.4.4.8.	Develop a process and procedures to standardize medical logistics readiness reporting for all the Services.	AP1.4.3.4.3., AP1.4.3.4.4.
AP1.4.4.4.9.	Create a joint system to provide military medical total asset visibility.	AP1.4.3.4.3., AP1.4.3.4.4., AP1.3.1.4.4.
AP1.4.4.4.10.	Create a system to provide commercial asset visibility.	AP1.4.3.4.3., AP1.4.3.4.4., AP1.3.1.4.4.
AP1.4.4.4.11.	Develop metrics to determine joint operational efficiency and effectiveness of the medical logistics system.	
AP1.4.4.4.12.	Develop joint procedural guidance for safe transportation of potentially hazardous medical and environmental samples.	
AP1.4.5.4.1.	Provide a process and procedures to obtain air worthiness release of AE equipment.	
AP1.4.5.4.2.	Determine the PMI requirement for echelons 1 and 2 to include: theater pools, maintenance, and retrograde responsibilities, taskings and funding.	AP1.2.1.4.1., AP1.2.3.4.1., AP1.1.1.4.1.
AP1.4.5.4.3.	Provide a process and procedures to integrate the aeromedical certification process between the Services and the Agencies.	
AP1.4.5.4.4.	Develop and deploy a system to track and manage Patient Movement Items.	
AP1.4.5.4.5.	Develop processes and procedures for PMI management at the tactical level.	

AP4.5. MEDICAL EVACUATION

Task Number	Task Description	Depends on
AP1.5.1.4.1.	Develop a joint requirements tool incorporating DoD and MHS data architecture and standard tool sets that identifies patient evacuee requirements (quantity and type) by time and location from 1st responder to CONUS based on a war fight.	AP1.1.1.4.1., AP1.1.1.4.2., AP1.1.1.4.3., AP1.1.1.4.4., AP1.2.1.4.2., AP1.2.3.4.2.
AP1.5.1.4.2.	Determine future clinical and operational medical evacuation requirements for each mode of patient transportation.	AP1.1.1.4.1., AP1.1.1.4.2., AP1.1.1.4.3., AP1.1.1.4.4., AP1.2.2.4.2.
AP1.5.1.4.3.	Identify clinical and operational shortfalls and develop programs to meet theater medical evacuation requirements.	AP1.1.1.4.1.,, AP1.1.1.4.3., AP1.1.1.4.4., AP1.2.2.4.2.
AP1.5.2.4.1.	Identify chain of command for CONUS treatment during wartime and peacetime contingencies.	AP1.1.1.4.1., AP1.1.1.4.3., AP1.1.1.4.4.
AP1.5.2.4.2.	Define CONUS treatment areas.	AP1.1.1.4.1., AP1.1.1.4.3., AP1.1.1.4.4.
AP1.5.2.4.3.	Identify overall CONUS patient treatment capability.	AP1.1.1.4.1., AP1.1.1.4.3., AP1.1.1.4.4.
AP1.5.2.4.4.	Develop CONUS treatment-specific casualty reception and/or distribution plans, matching requirements to medical capability.	AP1.1.1.4.1., AP1.1.1.4.3., AP1.1.1.4.4., AP1.2.2.4.2., AP1.10.2.4.6.
AP1.5.3.4.1.	Explore and identify alternative strategies to integrate ground, sea, and air evacuation capabilities.	AP1.1.1.4.1., AP1.3.1.4.4.
AP1.5.3.4.2.	Develop a Plan to test the integrated evacuation strategies.	AP1.5.3.4.1., AP1.1.1.4.1., AP1.1.1.4.2.,AP1.1.1.4.3., AP1.1.1.4.4., AP1.2.2.4.2.
AP1.5.3.4.3.	Develop an exercise schedule to test joint medical evacuation doctrine to identify interoperability problems and other issues not solved by the joint doctrine.	AP1.5.3.4.2.
AP1.5.4.4.1.	Develop joint policy guidance to ensure safe movement of contaminated patients.	AP1.10.2.4.1., AP1.10.2.4.4.
AP1.5.4.4.2.	Approve new joint policy on the safe movement of contaminated patients.	AP1.5.4.4.1.
AP1.5.4.4.3.	Develop implementation plans including training protocols ensuring safe transport of contaminated patients.	AP1.5.4.4.2., AP1.2.2.4.2., AP1.4.3.4.3.
AP1.5.5.4.1.	Modernize Army ground and air evacuation assets by force package, and in concert with the Department of the Army Master Priority List.	AP1.11.1.4.3.
AP1.5.5.4.2.	Study use of maritime assets that could potentially be used as sea evacuation platforms.	AP1.5.3.4.1.
AP1.5.5.4.3.	Develop plans and procedures to move Army and Marine patients from Echelon 2 to Echelon 3 facilities using Air Force C-130s when distances exceed rotary-wing capabilities.	AP1.5.3.4.1.
AP1.5.5.4.4.	Develop plans to exercise and refine procedures for AE CRAF operations.	AP1.2.2.4.2., AP1.5.1.4.2.

AP4.6. MANPOWER AND PERSONNEL

Task Number	Task Description	Depends on
AP1.6.1.4.1.	Develop a Plan to utilize IMAs to fill subspecialties not justified by peacetime workload.	
AP1.6.1.4.2.	Develop a Plan to assign statutorily and/or contractually obligated personnel to unit vacancies, regardless of geographic boundaries.	
AP1.6.1.4.3.	Develop a Plan to fund and identify Reserve component turn-over and training tail to ensure that on execution UTC deployment is 100 percent.	
AP1.6.1.4.4.	Develop Plan to review and update officer and enlisted incentive programs that meet the recruiting and retention needs of the Services.	
AP1.6.1.4.5.	Review and update accession standards to ensure that PM criteria are included.	
AP1.6.2.4.1.	Develop a standardized set of joint minimum criteria for medical and dental fitness for deployability.	AP1.8.4.4.2.
AP1.6.2.4.2.	Develop a process to ensure that minimum medical and dental fitness standards are applied consistently across all the Services.	AP1.6.2.4.1.
AP1.6.2.4.3.	Develop a standardized, automated, and readily accessible medical and dental status report using standard DoD and MHS data architecture for the total force, active and reserve, to include immunizations, medical and/or physical profiles, medications, fitness status, dental status, G6PD status, DNA status, eyeglass insert status; etc.	AP1.6.2.4.1., AP1.12.1.4.1., AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3., AP1.8.4.4.2.
AP1.6.2.4.4.	Develop a monitoring system to ensure that AC/Reserve component specialty skills match billet requirements within all the Services and the DoD Components.	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3.

AP4.7. DOD MEDICAL READINESS TRAINING SYSTEM

Task Number	Task Description	Depends on
AP1.7.1.4.1.	Rewrite DoD Instruction 1322.24 (reference (e)) to clarify terms and define joint and Service-specific training categories.	
AP1.7.1.4.2.	Develop a standard method (e.g., DMHRS) using the DoD and MHS data architecture standards to document training completion by individual and by operational platform and/or unit.	
AP1.7.1.4.3.	Implement minimum joint medical readiness training requirements as determined by the Joint Medical Readiness Training Needs Analysis Working Group.	AP1.7.1.4.5.
AP1.7.1.4.4.	Establish a Joint PM training review group which reports to the Defense Medical Readiness Training and Education Council (DMRTEC).	
AP1.7.1.4.5.	Identify commonalities in medical readiness training activities between the Services for achieving efficiencies.	AP1.10.4.4.1., AP1.10.4.4.3.
AP1.7.1.4.6.	Develop a Plan to ensure adequate training of the MCS contract network providers that will provide the supplemental manpower needed to support the CONUS-based hospitals during extended medical contingencies.	
AP1.7.2.4.	Develop a Plan to conduct joint training in the following areas: leadership, regional expert training, communication, logistics, medical evacuation, medical planning, NBC, PM, medical intelligence, and telemedicine utilization and equipment maintenance.	AP1.7.1.4.3., AP1.3.1.4.5., AP1.4.4.4.6., AP1.7.1.4.4., AP1.10.4.4.3. AP1.10.4.4.4., AP1.10.4.4.5.,AP1.1.2.4.1., AP1.1.2.4.2., AP1.10.4.4.8., AP1.5.3.4.2., AP1.10.4.4.7., AP1.5.3.4.3., AP1.10.4.4.11.,AP1.10.4.4.2., AP1.4.4.4.1., AP1.5.5.4.3., AP1.5.5.4.4., AP1.10.1.4.9., AP1.5.4.4.3., AP1.12.2.4.3.,AP1.10.3.4.5., AP1.11.2.4.6., AP1.4.4.4.12.
AP1.7.3.4.1.	Revisit the planned closure of three Army RTS-MED sites in light of the tri-Service training requirement.	
AP1.7.3.4.2.	Develop a joint medical readiness-training curriculum for use at regional field training sites.	AP1.7.2.4.
AP1.7.3.4.3.	Establish a tri-Service scheduling process to facilitate maximum utilization of the sites and to increase joint training experiences.	AP1.7.3.4.2.
AP1.7.3.4.4.	Provide core cadre of medical training and support personnel at each regional field training site.	AP1.7.3.4.2.

Task Number	Task Description	Depends on
AP1.7.3.4.5.	Obtain and maintain DEPMEDS equipment training sets at each regional training site.	
AP1.7.4.4.1.	Plan, program, and implement the support of, as a minimum, one major Chairman, of the Joint Chiefs of Staff- or Combatant Command-sponsored exercise annually. This will include the deployment of one hospital unit and/or element from each Military Department and the use of the active and Reserve complement to evaluate deployment, beneficiary health-care continuance, casualty expansion, and casualty evacuation.	
AP1.7.4.4.2.	Incorporate joint medical focused field play in exercises conducted at the combat training centers.	
AP1.7.4.4.3.	Develop plans to conduct joint, combined, and multi-Agency MOOTW exercise programs; i.e., field and simulation.	AP1.4.2.4.4., AP1.9.1.4.1., AP1.9.1.4.2.
AP1.7.4.4.4.	Develop a plan to exercise the VA and DoD CONPLAN, the ICMOP, the FRP, and the NDMS.	AP1.7.4.4.3.

AP4.8. BLOOD

Task Number	Task Description	Depends on
AP1.8.1.4.1.	Implement standardized key manufacturing practices to meet FDA quality assurance guidelines.	
AP1.8.1.4.2.	Complete modernization development, deployment and movement of a Y2K compliance assured DBSS to Windows NT environment or latest technology.	AP1.3.3.4.1., AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3., AP1.3.1.4.4.
AP1.8.1.4.3.	Determine best reimbursement method(s) inter- and intra-Service to support readiness missions for blood collection, manufacturing, and testing.	
AP1.8.1.4.4.	Determine the feasibility of establishing joint-consolidated blood centers for the most efficient manufacturing, testing, and operations within the blood community.	
AP1.8.1.4.5.	Develop and deploy global donor deferral and look back in DBSS.	AP1.8.1.4.2.
AP1.8.1.4.6.	Develop a standardized medical education and consultation program to familiarize health-care providers with wartime transfusion practices.	AP1.1.1.4.5.
AP1.8.1.4.7.	Establish guidelines for privatization of blood manufacturing, testing, and operations without compromising the readiness mission.	
AP1.8.1.4.8.	Assess the possibility of maximizing plasma recovery from individual whole blood collection to support the solvent detergent contract.	
AP1.8.1.4.9.	If feasible, maximize plasma recovery.	AP1.8.1.4.8.
AP1.8.1.4.10.	If feasible, establish joint consolidated blood centers.	AP1.8.1.4.4.
AP1.8.1.4.11.	Develop and deploy laboratory system interface for DBSS.	AP1.8.1.4.2.
AP1.8.1.4.12.	Develop and deploy electronic storage of blood data in DBSS.	AP1.8.1.4.2.
AP1.8.1.4.13.	Obtain and deploy automated blood product labeling system for DBSS.	
AP1.8.2.4.	Evaluate the impact of the use of blood components and substitutes (e.g. fibrin bandage, platelets, plasma, red cells, etc.) on joint medical doctrine and R&D.	AP1.11.1.4.3.
AP1.8.3.4.1.	Implement use of frozen red blood cells in select MTFs, as appropriate, to manage local red cell inventories, meet clinical requirements, and to maintain training for wartime readiness.	
AP1.8.3.4.2.	Integrate FDA licensed solvent detergent plasma in transfusion hemotherapy.	
AP1.8.4.4.1.	Improve on platelet availability to support all contingency operations.	
AP1.8.4.4.2.	Ensure accuracy of blood groups on ID tags and/or cards.	
AP1.8.4.4.3.	Determine impact of emerging blood technologies and changing clinical practices on blood planning factors.	

Task Number	Task Description	Depends on
AP1.8.4.4.4.	Determine if DEPMEDS blood policies and guidelines are applicable for MOOTW.	
AP1.8.4.4.5.	Provide a TDBSS and JTAV interface for Combatant Command blood asset visibility.	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3., AP1.3.1.4.4., AP1.3.3.4.1.
AP1.8.4.4.6.	Complete all planned BPD projects.	
AP1.8.5.4.1.	Develop appropriate local hemostatic agents (e.g. fibrin sealant, fibrin glues, and fibrin bandages; etc.) for far-forward and surgical control of bleeding.	AP1.11.1.4.3.
AP1.8.5.4.2.	Develop the capability to extend the shelf life of blood products (e.g. red cells, platelets, plasma, etc.).	AP1.11.1.4.3.
AP1.8.5.4.3.	Determine blood product requirements and blood planning factors in NBC environments.	AP1.10.2.4.6., AP1.10.2.4.5., AP1.10.2.4.3., AP1.11.1.4.3., AP1.10.5.4.8., AP1.2.1.4.1.
AP1.8.5.4.4.	Determine feasibility of in-theater collection of platelets.	
AP1.8.5.4.5.	Develop universally transfusable blood products and substitutes (e.g., stroma-free hemoglobin, liposomal encapsulated hemoglobin, and enzymatically converted red cells).	AP1.11.1.4.3.
AP1.8.5.4.6.	Develop sterilization and rapid infectious disease detection techniques for blood products (e.g., red cells, platelets, plasma, and whole blood; etc.).	AP1.11.1.4.3.
AP1.8.5.4.7.	Determine the effects of hemorrhagic shock on blood product utilization.	
AP1.8.5.4.8.	Establish an annual review process for current military and civilian blood R&D initiatives.	AP1.11.1.4.3.
AP1.8.5.4.9.	Develop automated field production of water for injection (e.g., blood product washing and reconstitution; etc.).	AP1.11.1.4.3.

AP4.9. MOOTW

Task Number	Task Description	Depends on
AP1.9.1.4.1.	Establish policies and procedures to include the VA, the TRICARE contract networks, and the NDMS in casualty flow planning and execution.	AP1.5.1.4.1., AP1.1.1.4.1.
AP1.9.1.4.2.	Develop policy for MSCA. Policy will address the employment of DoD MHS assets with the DHHS and the VA during execution of Emergency Support Function #8 under FRP.	

AP4.10. NBC DEFENSE

Task Number	Task Description	Depends on
AP1.10.1.4.1.	Develop a standardized, automated tracking mechanism for tracking personnel immunizations and other appropriate medical CMs and surveillance data.	AP1.6.2.4.3., AP1.12.1.4.1., AP1.12.1.4.4., AP1.12.1.4.5., AP1.12.1.4.8., AP1.3.3.4.4., AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3.
AP1.10.1.4.2.	Assign an NBC medical expert (i.e., at a minimum MENW and MMCBC and/or FMCBC trained) on Combatant Command surgeon staff responsible for medical NBC matters, who will be able to identify and discuss the operational impacts of NBC weapons as well as their CMs.	
AP1.10.1.4.3.	Establish a procedure to ensure medical coordination during the development and testing of personal protective equipment, collective protective equipment, and decontamination procedures to ensure their effectiveness against the NBC threat.	
AP1.10.1.4.4.	Develop contingency plans for the five most critical Biological Defense vaccines to include approval process, training of medical personnel, troop briefings, documentation, tracking, and medical monitoring.	AP1.6.2.4.3., AP1.12.1.4.1., AP1.12.1.4.4., AP1.12.1.4.5., AP1.12.1.4.8.
AP1.10.1.4.5.	Critically review the feasibility of implementing the current patient decontamination doctrine of using supported units' manpower and report the results to the TRICARE Readiness Committee and the ASD(HA).	
AP1.10.1.4.6.	Procure and stockpile sufficient medical CMs to meet operational needs for NBC threats. Develop a process to monitor sustainment and/or replacement of medical CMs beyond initial acquisition.	
AP1.10.1.4.7.	Resource the requirement to provide collective protective shelters for field medical facilities and report the results to the TRC.	
AP1.10.1.4.8.	Develop new threat information for emerging radiological hazards and other toxicological hazards encountered in operations other than war.	
AP1.10.1.4.9.	Develop a medical NBC defense awareness course for senior level DoD personnel.	
AP1.10.2.4.1.	Update and formalize JTTPs for the medical management of NBC casualties to address the issues of operations, decontamination, treatment, tracking, and/or evacuation and/or quarantine of large numbers of personnel exposed to specific BW and/or CW agents or nuclear radiation hazards, to or through foreign territories.	
AP1.10.2.4.2.	Integrate newly developed NBC medical defense TTPs into OPLANS and fixed facility Emergency Response Plans; exercise, wargame, and evaluate the effectiveness of those plans for NBC attack response.	AP1.10.2.4.1.
AP1.10.2.4.3.	Develop treatment guidelines for medical management of radiation casualties and casualties resulting from a combination of radiation with conventional, biological, and/or chemical injuries.	AP1.11.1.4.3.

Task Number	Task Description	Depends on
AP1.10.2.4.4.	Review and develop procedures as applicable for transporting NBC contaminated casualties.	
AP1.10.2.4.5.	Raise medical supply levels to support NBC casualty and/or prevention treatment, prepositioning as appropriate and upgrading the "push" supply system to allow for surge response.	AP1.10.2.4.6., AP1.10.2.4.2., AP1.1.1.4.1.
AP1.10.2.4.6.	Develop adequate medical casualty modeling for the full spectrum of NBC threats to allow for medical treatment and evacuation planning. Integrate that modeling into appropriate OPLANS.	AP1.10.5.4.8., AP1.10.5.4.9., AP1.2.1.4.1., AP1.2.1.4.2.
AP1.10.3.4.1.	Expand the scope of the automated patient information system to ensure standardized medical surveillance data collection. Include such elements as sources and magnitude of NBC exposure, medical treatments administered, and reporting so that it can be more effectively used in a joint environment. That database should facilitate long-term medical follow-up.	AP1.12.1.4.8., AP1.3.3.4.2., AP1.3.3.4.4., AP1.12.1.4.4., AP1.12.1.4.5.
AP1.10.3.4.2.	Develop a joint database of medical, environmental, and intelligence data that can be easily accessed by field users.	AP1.12.1.4.1., AP1.12.1.4.4., AP1.12.1.4.5., AP1.12.1.4.8., AP1.3.1.4.4., AP1.3.2.4.1.
AP1.10.3.4.3.	Establish a tri-Service working group to coordinate, plan, develop, and implement capabilities for theater diagnostic laboratories for NBC agents.	
AP1.10.3.4.4.	Ensure incorporation of NBC surveillance, detection, and identification aspects into joint exercises for the purpose of evaluating readiness capabilities.	
AP1.10.3.4.5.	Develop a process to ensure coordinated medical input from the Services into the development and fielding of NBC detection devices.	AP1.11.1.4.2.
AP1.10.3.4.6.	Develop field expedient method for accomplishing internal dosimetry for deployed forces operating in radiation environments.	AP1.11.1.4.3., AP1.10.3.4.7.
AP1.10.3.4.7.	Deploy rugged, durable radiation monitors (e.g., semiconductor based) with alpha and low-energy beta capability for PM and FHs.	AP1.11.1.4.3.
AP1.10.3.4.8.	Develop a capability to determine qualitative and quantitative levels of exposure to CW agents.	AP1.11.1.4.3.
AP1.10.4.4.1.	Develop an oversight process that measures medical NBC readiness training at MTF's and in active and Reserve component units. Oversight must include evaluation of common task training, especially NBC survival and NBC casualty management skills, and implement Service-specific training corrective measures.	AP1.7.1.4.2.
AP1.10.4.4.2.	Insert NBC Defense training into unit level field medical training (e.g., Medical Red Flag) and exercises as referenced in Action Plan 34 and evaluate the effectiveness of the training.	
AP1.10.4.4.3.	Establish joint NBC training requirements for medical personnel.	AP1.10.2.4.1., AP1.10.2.4.2., AP1.10.2.4.3., AP1.10.2.4.4.
AP1.10.4.4.4.	Expand the MMCBC to meet the tri-Service deployment requirements.	AP1.10.4.4.3.

Task Number	Task Description	Depends on
AP1.10.4.4.5.	Modify the MENW course to incorporate MOOTW radiological hazards.	
AP1.10.4.4.6.	Determine how directed energy threat, diagnosis, and treatment training should be disseminated to designated primary care providers.	
AP1.10.4.4.7.	Develop tri-Service FMCBC and Field MENW courses intended for health-care support personnel to meet deployment requirements. Emphasis will be placed on casualty management prior to arrival to MTFs (e.g., decontamination, agent detection, equipment use, operation planning, NBC agent effects and characteristics, required PPE and/or MOPP, and radiation effects).	AP1.10.2.4.1., AP1.10.2.4.2., AP1.10.2.4.3.
AP1.10.4.4.8.	Sustain NBC skills learned in the MMCBC and the MENW course with CD ROM, VTT, VTC, or other appropriate means.	
AP1.10.4.4.9.	Code billets in deployable medical units (e.g., L-class ships, FH, CSH, ATH; etc.) both active and Reserve requiring MMCBC, MENW, and/or directed energy certification using the following guidance: the MMCBC, MENW, and/or directed energy training shall be required for the selected primary care physicians (ER, GMO, pediatrics, family practice, internal medicine), PAs, nurse practitioners, special forces medics, and independent duty corpsmen. MMCBC, MENW, and/or directed energy training certification for BSC, DC, VC, and RN billets shall be determined by the Services.	
AP1.10.4.4.10.	Code billets in deployable medical units (e.g., L-class ships, FH, CSH, MASH, ATH; etc.) for health-care support personnel both active and Reserve requiring the FMCBC and FMENW courses (i.e., to track personnel readiness posture).	
AP1.10.4.4.11.	Develop a tri-Service course for selected graduates (to be identified by the unit commanders) of MMCBC, MENW, FMENW, or FMCBC courses to enable them to provide unit training and expertise for management of chemical and/or biological casualties (a train-the-trainer program).	AP1.10.4.4.7.
AP1.10.4.4.12.	Review and revise the content of the MENW course with the goal of making it less technical and more relevant for primary care providers.	
AP1.10.5.4.1.	Develop guidance for operations in a contaminated environment that will allow commanders to effectively function while accepting risks that are consistent with operational exposure guidance.	AP1.10.5.4.10.
AP1.10.5.4.2.	Establish policy statement regarding the adequacy of operational radiation exposure guidance levels for women in operations other than war.	AP1.11.1.4.3.
AP1.10.5.4.3.	Assess immediate and long-term health effects of exposure to DU (for men and women).	AP1.11.1.4.3.
AP1.10.5.4.4.	Develop DU treatment protocols and policies for long-term health effects monitoring.	AP1.11.1.4.3., AP1.10.5.4.3.
AP1.10.5.4.5.	Develop training programs for medical personnel on the treatment and risks associated with DU injuries.	AP1.10.5.4.4., AP1.10.5.4.7.
AP1.10.5.4.6.	Procure and sustain DU equipment sets developed to execute immediate treatment protocols.	
AP1.10.5.4.7.	Develop modified equipment sets to execute immediate treatment protocols for exposures to DU.	AP1.10.5.4.4.

Task Number	Task Description	Depends on
AP1.10.5.4.8.	Develop data required to make predictions of effects of sub-lethal ionizing radiation exposure alone and in combination with multiple insults (e.g., infectious agents and injuries).	AP1.11.1.4.3.
AP1.10.5.4.9.	Incorporate data regarding the effects of sub-lethal ionizing radiation exposure alone and in combination with multiple insults (e.g., infectious agents and injuries) into casualty prediction models.	AP1.10.5.4.8.
AP1.10.5.4.10.	Write a policy that provides field criteria for performing assessments of internal doses of radiation.	AP1.10.5.4.8.
AP1.10.5.4.11.	Identify the force structure (personnel and equipment) required to implement the doctrine for internal radiation exposures during military operations (from peacekeeping to high-intensity combat) for military operations.	AP1.10.5.4.10.

AP4.11. R&D

Task Number	Task Description	Depends on
AP1.11.1.4.1.	Draft and obtain approval for a new charter for the ASBREM Committee authorizing the establishment of a biomedical needs integration subcommittee.	
AP1.11.1.4.2.	Establish a standing subcommittee within the new ASBREM Committee empowered to collect, integrate and prioritize biomedical R&D-related military operational needs for approval by ASBREM Committee. Membership should include the Services, the Chairman of the Joint Chiefs of Staff, and the ASD(HA).	AP1.11.1.4.1.
AP1.11.1.4.3.	Publish a complete, prioritized list of biomedical R&D-related military operational needs by Feb 98 and update annually thereafter.	AP1.11.1.4.2., AP1.11.2.4.1.
AP1.11.2.4.1.	Establish a tri-Service organization to manage all medical R&D efforts.	
AP1.11.2.4.2.	Establish a mechanism to ensure the involvement of the functional sponsor throughout the R&D cycle (basic research through implementation of research results).	AP1.11.1.4.2.
AP1.11.2.4.3.	Expedite fielding of IND products through well defined policies and procedures to include medical records and informed consent.	
AP1.11.2.4.4.	The Service SGs provide to the TRC an annual "Medical Readiness critical acquisition billet report" which demonstrates compliance with the "Defense Acquisition Workforce Improvement Act" (10 U.S.C., reference (bb)) and justify or provide rationale for shortfalls or changes.	
AP1.11.2.4.5.	Using the 733 Update Study, the Service SGs provide to the TRC an annual "Medical Readiness R&D Scientists" report that identifies what billets are filled and to justify or provide rationale for shortfalls or changes.	
AP1.11.2.4.6.	Establish a mechanism to enhance training of the operational forces in use of new biomedical R&D products.	AP1.1.1.4.5., AP1.1.1.4.3., AP1.1.1.4.1., AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3.
AP1.11.2.4.7.	Develop a Plan to ensure joint application of all R&D projects, when appropriate.	
AP1.11.2.4.8.	Develop a system to incorporate information based products (e.g., treatment protocols, physiological tables, medical surveillance data, and exposure limits; etc.) into the Services' and joint training and doctrine.	AP1.12.1.4.1.
AP1.11.2.4.9.	Develop processes that ensure ongoing coordination among functional research areas.	
AP1.11.2.4.10.	Develop a tri-Service plan that promotes leveraging and cross-utilization of DoD and COTS assets.	
AP1.11.2.4.11.	Develop common metrics for laboratory performance; e.g., overhead cost, scientific productivity, and managerial efficiency.	
AP1.11.2.4.12.	Standardize the data architecture and information management systems among labs to enhance communication and coordination.	

Task Number	Task Description	Depends on
AP1.11.2.4.13.	Develop procedures that ensure R&D research managers know and utilize non-DoD research; e.g., civilian, Federal and international.	
AP1.11.2.4.14.	Examine the development process for new military systems (e.g., weapons, lasers, sonar, and microwaves) to identify health issues related deployment of those systems and to determine if a biomedical R&D effort is required.	AP1.11.1.4.2., AP1.12.1.4.8.

AP4.12. PM

Task Number	Task Description	Depends on
AP1.12.1.4.1.	Establish a process to include PM input into the functional requirements, development, and testing stages of all new health information systems and the modification of existing systems.	
AP1.12.1.4.2.	Program resources needed to conduct epidemiological data collection, analysis, and reporting.	
AP1.12.1.4.3.	Define core data elements for health surveillance that should be standardized across the Services and the TRICARE MCS contract networks.	AP1.12.1.4.4., AP1.12.1.4.5.
AP1.12.1.4.4.	Determine requirements for epidemiological data collection and analysis for development of a force health surveillance system for gathering, analyzing, and disseminating population-based health information during peacetime and contingencies.	
AP1.12.1.4.5.	Incorporate all identified requirements into the development and integration of new or modified health and personnel information systems, to include the ambulatory data system, immunization tracking system, communicable disease reporting systems; etc., using DoD and MHS data standards and architecture.	AP1.12.1.4.4.
AP1.12.1.4.6.	Assess and deploy existing software and, if necessary, develop software to support both aggregate and individual disease data collection, analysis, and reporting in the field.	AP1.12.1.4.4., AP1.12.1.4.5.
AP1.12.1.4.7.	Establish a tri-Service data analysis and reporting center for assessing and reporting total force health status.	
AP1.12.1.4.8.	Establish a tri-Service longitudinal database for all Service personnel which links with non-DoD databases and includes environmental and/or occupational exposure data, personnel data, intervention data (e.g., immunizations), and health outcome data.	AP1.12.1.4.1.
AP1.12.1.4.9.	Identify and prioritize DoD health-related questions requiring epidemiological analysis.	
AP1.12.1.4.10.	Develop a process for collection and analysis of joint deployment surveillance data from the Combatant Commands to forward to the Chairman of the Joint Chiefs of Staff for actions required to minimize preventable disease and injuries.	AP1.3.1.4.1., AP1.3.1.4.2., AP1.3.1.4.3.
AP1.12.1.4.11.	Review and modify DNBI reporting categories to more accurately reflect disease incidence in deployed populations.	AP1.2.3.4.2.
AP1.12.2.4.1.	Identify standardized methodologies, using nationally accepted models, for measuring prevention program feasibility and effectiveness.	
AP1.12.2.4.2.	Identify appropriate measures of performance and effectiveness for evaluating total force pre-, during, and post-deployment prevention activities.	
AP1.12.2.4.3.	Formally evaluate all proposed and existing prevention programs or interventions.	
AP1.12.2.4.4.	Develop a prioritization plan describing use of scarce PM resources by the Services in support of the Combatant Commands.	
AP1.12.3.4.1.	Review and update JOPES guidance to ensure appropriate medical intelligence is included in contingency planning and execution documents.	AP1.1.1.4.3.

Task Number	Task Description	Depends on
AP1.12.3.4.2.	Review and/or update and/or develop joint requirements for medical intelligence products to ensure that they meet consumer needs, addressing the full spectrum of anticipated contingencies and including all required information.	AP1.1.1.4.1., AP1.1.1.4.2.
AP1.12.3.4.3.	Task the Combatant Commands and the Services to ensure that all pertinent overseas field medical information for validating and/or updating medical intelligence databases is forwarded to AFMIC in a timely manner.	

AP5. APPENDIX 5

REQUIRED CAPABILITY LINKS

AP5.1. REQUIRED CAPABILITIES

Required Capabilities
1. Military health-care providers who are physically fit to deploy, and who are highly trained and proficient in the art of military medicine.
2. Military health-care providers trained with the supplies and equipment of their respective deployable platforms and units.
3. Military (medical and non-medical) leaders at all levels who are well founded in military medical doctrine, tactics, techniques, and procedures.
4. Mission-capable medical units and individuals that are ready for rapid mobilization and strategic deployment to sustain medical support for any mission within the operational spectrum.
5. Units with increased flexibility and mobility that can be tailored for a variety of potential missions.
6. A medical evacuation system that incorporates multiple evacuation platforms into a seamless intra- and inter-theater patient evacuation system; and which employs interoperable patient movement items that function on any evacuation platform.
7. Medical information management systems that accommodate command and control, medical logistics, and patient accountability, and that are integrated into a responsive and unencumbered architecture.
8. Medical units and/or platforms and evacuation vehicles equipped to communicate by voice and other electronic means with supporting and supported forces, and across Service lines.
9. Senior leaders who recognize advancements in medical practice and technologies, through training and acquisition initiatives, which sustain DoD ability to provide medical care during any contingency and under the most austere conditions.
10. Integrated PM services for the DoD community, ensuring a healthy and fit fighting force.
11. A logistics system that provides reliable, responsive, and timely support when and where it is needed from the "factory to the foxhole."

AP5.2. PLANNING

Task Number	Task Description	Required Capability Links
AP1.1.1.4.1.	Create a joint medical planning tool to do requirements and capabilities-based planning. That tool should be approved for planning and programming.	2,5,7
AP1.1.1.4.2.	Develop a process to continuously refine and maintain the approved joint medical planning tool.	2,7,9
AP1.1.1.4.3.	Establish a process to ensure communication between users, modelers, and factor developers during development of medical planning tools.	2,3,7
AP1.1.1.4.4.	Define a process to standardize and integrate the development of planning factors to support existing and future planning tools.	2,3,7
AP1.1.1.4.5.	Develop a medical reference Web Site that provides existing medical Joint Pubs, JTTPs, and other reference materials.	3,4,7
AP1.1.2.4.1.	Identify prerequisite training and experience requirements for operational planning billets.	3,9
AP1.1.2.4.2.	Establish continuing joint education and refresher training for medical planners, and other medical department personnel.	2,4,9

AP5.3. REQUIREMENTS, CAPABILITIES AND ASSESSMENT

Task Number	Task Description	Required Capability Links
AP1.2.1.4.1.	Develop a comprehensive, Y2K compliant, clinical database to support planning and programming.	5,7,10
AP1.2.1.4.2.	Develop standardized planning factors across the continuum of care, to cover the full spectrum of operations including guidelines for application.	4,5,7
AP1.2.1.4.3.	Develop a process for continual review and validation of the clinical database and all planning factors.	2,7,11
AP1.2.2.4.1.	Develop a process to ensure medical coordination during the development of wargaming models.	5,7,9
AP1.2.2.4.2.	Incorporate realistic medical scenarios into wargaming models.	5,7,9
AP1.2.3.4.1.	Add new PC Codes and "task, time, treater," data for ICD-9 codes of military significance.	3,5,7
AP1.2.3.4.2.	Develop standardized definitions for admissions and presentations.	3,4,5

AP5.4. C4IM

Task Number	Task Description	Required Capability Links
AP1.3.1.4.1.	Gather medical service and Combatant Command telecommunications requirements (e.g., operational requirements, system constraints, and interface requirements) to ensure interoperability.	4,5,8
AP1.3.1.4.2.	Validate requirements with joint and Service organizations and coordinate with the DISA and the Chairman of the Joint Chiefs of Staff J-6.	4,5,8
AP1.3.1.4.3.	Incorporate Service and joint medical requirements as applicable, into the line infrastructure.	4,5,8
AP1.3.1.4.4.	Develop the global communications architecture and a life-cycle acquisition strategy to integrate into the line community's communication capability that is in compliance with the JTA, the DII COE, and the C4ISR Architecture Framework.	4,5,8
AP1.3.1.4.5.	Define and implement training for joint medical communications operations and unit level communications operations.	1,2,4
AP1.3.1.4.6.	Establish a process to update Service and Combatant Command medical communications requirements baselines at a minimum of 24 months.	4,8,9
AP1.3.1.4.7.	Establish a process and conduct ongoing COEA of medical communication capabilities to substantiate the operational return on investment during contingency operations.	4,8,9
AP1.3.2.4.1.	Define medical situational awareness functional requirements.	3,7
AP1.3.2.4.2.	Perform market survey to evaluate GOTS and COTS alternatives.	7,9
AP1.3.2.4.3.	Design and prototype a joint medical situational awareness system based on functional requirements.	7,9
AP1.3.2.4.4.	Conduct operational test and evaluation.	7,8
AP1.3.2.4.5.	Field system.	5,7,9
AP1.3.2.4.6.	Identify and coordinate medical data standardization with SHADE direction.	7,8
AP1.3.3.4.1.	Adequately resource TMIP requirements in the FYDP.	4,7,8
AP1.3.3.4.2.	Define the essential subset of the CPR, which is required for medical support of contingency operations.	4,7
AP1.3.3.4.3.	Develop a joint security classification guide for medical information to ensure that all the Services comply with information integrity, patient privacy, and Geneva Convention implications.	7,8
AP1.3.3.4.4.	Field a PIC to provide on demand access to dynamic individual personnel and medical information.	6,7,8
AP1.3.3.4.5.	Develop a record for use in MOOTW (e.g., track refugees and disaster victims; etc.) compatible with the DHHS and the WHO.	4,7

AP5.5. LOGISTICS

Task Number	Task Description	Required Capability Links
AP1.4.1.4.1.	Develop a Plan to source full basic load and surge requirements for early deploying units, forward-deployed units, and any WR requirements prepositioned in the theater.	4,5,11
AP1.4.1.4.2.	Develop a Plan to source the basic load and surge requirements for early deploying forces.	4,5,11
AP1.4.1.4.3.	Develop a Plan to source sustainment for deployed forces.	4,5,11
AP1.4.1.4.4.	Integrate IPP process outcomes into medical logistics business practices.	4,5,11
AP1.4.1.4.5.	Test and evaluate the sourcing plans described in tasks AP1.4.1.4.1., AP1.4.1.4.2., and AP1.4.1.4.3. above.	4,5,11
AP1.4.1.4.6.	Achieve a minimum of 80 percent NSN/ Commercial numbering cross-reference capability.	4,7,11
AP1.4.1.4.7.	Develop a requisition system to provide automatic substitution for ordered items that is transparent to the ordering activity.	4,7,11
AP1.4.1.4.8.	Develop a methodology for disposal of hazardous, outdated, or excess medical materiel while deployed or prior to re-deployment..	4,10,11
AP1.4.1.4.9.	Develop a Plan to meet the surge and sustainment needs of the Services' requirements with 100 percent availability of materiel for planned and unplanned requirements.	4,5,11
AP1.4.1.4.10.	Develop a methodology for prioritization of competing medical materiel demands.	4,5,11
AP1.4.2.4.1.	Develop improved deployable, mobile, modular, tailorable medical capabilities while reducing the weight and cube.	5,6,11
AP1.4.2.4.2.	Establish a policy to require continuous assessment of assemblage status and rebuild and/or refurbish every 5 years; modernize, as required.	4,7,11
AP1.4.2.4.3.	Develop retrograde and reconstitution plans.	4,5,11
AP1.4.2.4.4.	Jointly develop augmentation sets that can be applied to DEPMEDS and non-hospital medical assemblages to support MOOTW.	4,5,11
AP1.4.2.4.5.	Develop a capability to monitor peacetime medical materiel consumption and use the information to standardize and modernize medical assemblages.	4,7,11
AP1.4.2.4.6.	Integrate the hospital ships and the CRTS platforms into the DEPMEDS standardization process.	2,4,11
AP1.4.2.4.7.	Integrate peacetime and wartime standardization processes.	4,11
AP1.4.3.4.1.	Develop satellite communications and bandwidth requirements for health services logistics support. Coordinate with the respective C4I activities to ensure these requirements are identified and supported in OPLANs and budget submissions.	4,7,8
AP1.4.3.4.2.	Incorporate logistics communications procedures in the medical annexes to all current OPLANs and contingency plans.	7,8
AP1.4.3.4.3.	Resource, develop, and field DMLSS (a long-term single medical logistics information management support system with world-wide and local user communications systems).	7,8,11
AP1.4.3.4.4.	Field DMLSS to deployable medical units.	7,8,11
AP1.4.4.4.1.	Determine joint operational requirements and roles for medical logistics management.	3,9,11

Task Number	Task Description	Required Capability Links
AP1.4.4.4.2.	Develop a detailed Plan to manage the flow of medical materiel (Factory to Foxhole) during contingency operations (e.g., AE CRAF).	4,7,11
AP1.4.4.4.3.	Test the transportation management Plan developed for transporting medical materiel during contingency operations.	4,7,11
AP1.4.4.4.4.	Develop interfaces with distribution and transportation planning and control systems to provide in-transit visibility.	4,7,11
AP1.4.4.4.5.	Analyze OPLANs and prepare joint medical logistics input.	3,4
AP1.4.4.4.6.	Develop plans for including joint medical logistics support in joint exercises.	3,4,11
AP1.4.4.4.7.	Incorporate a standardized list of critical equipment items into the D-Day Significant Item List.	5,7,11
AP1.4.4.4.8.	Develop a process and procedures to standardize medical logistics readiness reporting for all the Services.	4,7,11
AP1.4.4.4.9.	Create a joint system to provide military medical total asset visibility.	4,7,11
AP1.4.4.4.10.	Create a system to provide commercial asset visibility.	4,7,11
AP1.4.4.4.11.	Develop metrics to determine joint operational efficiency and effectiveness of the medical logistics system.	3,7,11
AP1.4.4.4.12.	Develop joint procedural guidance for safe transportation of potentially hazardous medical and environmental samples.	10,11
AP1.4.5.4.1.	Provide a process and procedures to obtain air worthiness release of AE equipment.	6,7,11
AP1.4.5.4.2.	Determine the PMI requirement for echelons 1 and 2 to include: theater pools, maintenance, and retrograde responsibilities, taskings and funding.	6,7,11
AP1.4.5.4.3.	Provide a process and procedures to integrate the aeromedical certification process between the Services and the Agencies.	6,7,11
AP1.4.5.4.4.	Develop and deploy a system to track and manage PMI.	6,7,11
AP1.4.5.4.5.	Develop processes and procedures for PMI management at the tactical level.	6,7,11

AP5.6. MEDICAL EVACUATION

Task Number	Task Description	Required Capability Links
AP1.5.1.4.1.	Develop a joint requirements tool incorporating DoD and MHS data architecture and standard tool sets that identifies patient evacuee requirements (quantity and type) by time and location from 1st responder to CONUS based on a war fight.	6,7,9
AP1.5.1.4.2.	Determine future clinical and operational medical evacuation requirements for each mode of patient transportation.	5,6,8
AP1.5.1.4.3.	Identify clinical and operational shortfalls and develop programs to meet theater medical evacuation requirements.	1,2,3
AP1.5.2.4.1.	Identify chain of command for CONUS treatment during wartime and peacetime contingencies.	6,7
AP1.5.2.4.2.	Define CONUS treatment areas.	6
AP1.5.2.4.3.	Identify overall CONUS patient treatment capability.	5,6
AP1.5.2.4.4.	Develop CONUS treatment-specific casualty reception and/or distribution plans, matching requirements to medical capability.	6,7,8
AP1.5.3.4.1.	Explore and identify alternative strategies to integrate ground, sea, and air evacuation capabilities.	3,6,9
AP1.5.3.4.2.	Develop a Plan to test the integrated evacuation strategies.	2,6,8
AP1.5.3.4.3.	Develop an exercise schedule to test joint medical evacuation doctrine to identify interoperability problems and other issues not solved by the joint doctrine.	2,6,8
AP1.5.4.4.1.	Develop joint policy guidance to ensure safe movement of contaminated patients.	3,6,9
AP1.5.4.4.2.	Approve new joint policy on the safe movement of contaminated patients.	3,6,9
AP1.5.4.4.3.	Develop implementation plans including training protocols ensuring safe transport of contaminated patients.	2,3,6
AP1.5.5.4.1.	Modernize Army ground and air evacuation assets by force package, and in concert with the Department of the Army Master Priority List.	6,8,9
AP1.5.5.4.2.	Study use of maritime assets, which could potentially be used as sea evacuation platforms.	6,8,9
AP1.5.5.4.3.	Develop plans and procedures to move Army and Marine patients from Echelon 2 to Echelon 3 facilities using Air Force C-130s when distances exceed rotary-wing capabilities.	3,8,9
AP1.5.5.4.4.	Develop plans to exercise and refine procedures for AE CRAF operations.	3,6,9

AP5.7. MANPOWER AND PERSONNEL

Task Number	Task Description	Required Capability Links
AP1.6.1.4.1.	Develop a Plan to utilize IMAs to fill subspecialties not justified by peacetime workload.	1,4,5
AP1.6.1.4.2.	Develop a Plan to assign statutorily and/or contractually obligated personnel to unit vacancies, regardless of geographic boundaries.	1,4,5
AP1.6.1.4.3.	Develop a Plan to fund and identify Reserve component turn-over and training tail to ensure that on execution UTC deployment is 100 percent.	1,4,5
AP1.6.1.4.4.	Develop Plan to review and update officer and enlisted incentive programs that meet the recruiting and retention needs of the Services.	1,4,9
AP1.6.1.4.5.	Review and update accession standards to ensure that PM criteria are included.	1,4,10
AP1.6.2.4.1.	Develop a standardized set of joint minimum criteria for medical and dental fitness for deployability.	1,4,10
AP1.6.2.4.2.	Develop a process to ensure that minimum medical and dental fitness standards are applied consistently across all the Services.	1,4,10
AP1.6.2.4.3.	Develop a standardized, automated, readily accessible medical and dental status report using standard DoD and MHS data architecture for the total force, active and Reserve, to include immunizations, medical and/or physical profiles, medications, fitness status, dental status, G6PD status, DNA status, eyeglass insert status; etc.	4,7,9
AP1.6.2.4.4.	Develop a monitoring system to ensure that AC and/or Reserve component specialty skills match billet requirements within all the Services and the DoD Components.	2,4,7

AP5.8. DOD MEDICAL READINESS TRAINING SYSTEM

Task Number	Task Description	Required Capability Links
AP1.7.1.4.1.	Rewrite DoD Instruction 1322.24 (reference (e)) to clarify terms and define joint- and Service-specific training categories.	3,4,9
AP1.7.1.4.2.	Develop a standard method (e.g., the DMHRS) using the DoD and MHS data architecture standards to document training completion by individual and by operational platform and/or unit.	2,4,7
AP1.7.1.4.3.	Implement minimum joint medical readiness training requirements as determined by the Joint Medical Readiness Training Needs Analysis Working Group.	3,4,9
AP1.7.1.4.4.	Establish a joint PM training review group that reports to the DMRTEC.	1,4,10
AP1.7.1.4.5.	Identify commonalities in medical readiness training activities between the Services for achieving efficiencies.	1,2,4
AP1.7.1.4.6.	Develop a Plan to ensure adequate training of the MCS contract network providers that will provide the supplemental manpower needed to support the CONUS-based hospitals during extended medical contingencies.	1,2,4
AP1.7.2.4.	Develop a Plan to conduct joint training in the following areas: leadership, regional expert training, communication, logistics, medical evacuation, medical planning, NBC, PM, medical intelligence, and telemedicine utilization and equipment maintenance.	3,4,9
AP1.7.3.4.1.	Revisit the planned closure of three Army RTS-MED sites in light of the tri-Service training requirement.	1,2,9
AP1.7.3.4.2.	Develop a joint medical readiness training curriculum for use at regional field training sites.	2,5,11
AP1.7.3.4.3.	Establish a tri-Service scheduling process to facilitate maximum utilization of the sites and to increase joint training experiences.	3,4,9
AP1.7.3.4.4.	Provide core cadre of medical training and support personnel at each regional field training site.	1,2,4
AP1.7.3.4.5.	Obtain and maintain DEPMEDS equipment training sets at each regional training site.	2,4,11
AP1.7.4.4.1.	Plan, program, and implement the support of, as a minimum, one major Chairman of the Joint Chiefs of Staff- or Combatant Command-sponsored exercise annually. That will include the deployment of one hospital unit/element from each Military Department and the use of the active and Reserve complement to evaluate deployment, beneficiary health-care continuance, casualty expansion and casualty evacuation.	4,5,6
AP1.7.4.4.2.	Incorporate, joint medical focused field play in exercises conducted at the combat training centers.	3,4,5
AP1.7.4.4.3.	Develop plans to conduct joint, combined, and multi-Agency MOOTW exercise programs; i.e., field and simulation.	3,4,6
AP1.7.4.4.4.	Develop a plan to exercise the VA and DoD CONPLAN, the ICMOP, the FRP and the NDMS.	3,4,6

AP5.9. BLOOD

Task Number	Task Description	Required Capability Links
AP1.8.1.4.1.	Implement standardized key manufacturing practices to meet FDA quality assurance guidelines.	2,4,5
AP1.8.1.4.2.	Complete modernization development, deployment and movement of a Y2K compliance assured DBSS to Windows NT environment or latest technology.	2,7,10
AP1.8.1.4.3.	Determine best reimbursement method(s) inter- and intra-Service to support readiness missions for blood collection, manufacturing, and testing.	2,5,9
AP1.8.1.4.4.	Determine the feasibility of establishing joint consolidated blood centers for the most efficient manufacturing, testing, and operations within the blood community.	2,4,5
AP1.8.1.4.5.	Develop and deploy global donor deferral and look back in DBSS.	7,8,10
AP1.8.1.4.6.	Develop a standardized medical education and consultation program to familiarize health-care providers with wartime transfusion practices.	1,3,9
AP1.8.1.4.7.	Establish guidelines for privatization of blood manufacturing, testing, and operations without compromising the readiness mission.	2,5,9
AP1.8.1.4.8.	Assess the possibility of maximizing plasma recovery from individual whole blood collection to support the solvent detergent contract.	2,10
AP1.8.1.4.9.	If feasible, maximize plasma recovery.	2,10
AP1.8.1.4.10.	If feasible, establish joint consolidated blood centers.	2,5,9
AP1.8.1.4.11.	Develop and deploy laboratory system interface for DBSS.	2,7,8
AP1.8.1.4.12.	Develop and deploy electronic storage of blood data in DBSS.	2,7,8
AP1.8.1.4.13.	Obtain and deploy automated blood product labeling system for DBSS.	2,7,11
AP1.8.2.4.	Evaluate the impact of the use of blood components and substitutes (e.g., fibrin bandage, platelets, plasma, and red cells; etc.) on joint-medical doctrine and R&D.	3,5,9
AP1.8.3.4.1.	Implement use of frozen red blood cells in select MTFs as appropriate to manage local red cell inventories, meet clinical requirements, and to maintain training for wartime readiness.	2,4,5
AP1.8.3.4.2.	Integrate FDA licensed solvent detergent plasma in transfusion hemotherapy.	2,4,10
AP1.8.4.4.1.	Improve on platelet availability to support all contingency operations.	2,4,5
AP1.8.4.4.2.	Ensure accuracy of blood groups on ID tags and/or cards.	2,5,10
AP1.8.4.4.3.	Determine impact of emerging blood technologies and changing clinical practices on blood planning factors.	3,4,9
AP1.8.4.4.4.	Determine if DEPMEDS blood policies and guidelines are applicable for MOOTW.	4,5
AP1.8.4.4.5.	Provide a TDBSS and JTAV interface for Combatant Command blood asset visibility.	7,8,9
AP1.8.4.4.6.	Complete all planned BPD projects.	2
AP1.8.5.4.1.	Develop appropriate local hemostatic agents (e.g., fibrin sealant, fibrin glues, and fibrin bandages; etc.) for far-forward and surgical control of bleeding.	2,4,5
AP1.8.5.4.2.	Develop the capability to extend the shelf life of blood products (e.g., red cells, platelets, plasma; etc.).	4,5,11
AP1.8.5.4.3.	Determine blood product requirements and blood planning factors in NBC environments.	4,9,10

Task Number	Task Description	Required Capability Links
AP1.8.5.4.4.	Determine feasibility of in theater collection of platelets.	2,4,5
AP1.8.5.4.5.	Develop universally transfusable blood products and substitutes (e.g., stroma-free hemoglobin, liposomal encapsulated hemoglobin, and enzymatically converted red cells).	4,5,10
AP1.8.5.4.6.	Develop sterilization and rapid infectious disease detection techniques for blood products (e.g., red cells, platelets, plasma, and whole blood; etc.).	4,5,11
AP1.8.5.4.7.	Determine the effects of hemorrhagic shock on blood product utilization.	4,5,10
AP1.8.5.4.8.	Establish an annual review process for current military and civilian blood R&D initiatives.	9
AP1.8.5.4.9.	Develop automated field production of water for injection (e.g., blood product washing, and reconstitution; etc.).	2,4,11

AP5.10. MOOTW

Task Number	Task Description	Required Capability Links
AP1.9.1.4.1.	Establish policies and procedures to include the VA, the TRICARE contract networks, and NDMS in casualty flow planning and execution.	3,6
AP1.9.1.4.2.	Develop policy for MSCA. Policy will address the employment of DoD MHS assets with the DHHS and the VA during execution of Emergency Support Function #8 under the FRP.	3

AP5.11. NBC DEFENSE

Task Number	Task Description	Required Capability Links
AP1.10.1.4.1.	Develop a standardized, automated tracking mechanism for tracking personnel immunizations and other appropriate medical CMs and surveillance data.	7,10,11
AP1.10.1.4.2.	Assign an NBC medical expert (i.e., at a minimum MENW and MMCBC and/or FMCBC trained) on Combatant Command surgeon staff responsible for medical NBC matters, who will be able to identify and discuss the operational impacts of NBC weapons as well as their CMs.	3,4,9
AP1.10.1.4.3.	Establish a procedure to ensure medical coordination during the development and testing of personal protective equipment, collective protective equipment, and decontamination procedures to ensure their effectiveness against the NBC threat.	2,11
AP1.10.1.4.4.	Develop contingency plans for the five most critical Biological Defense vaccines to include approval process, training of medical personnel, troop briefings, documentation, tracking, and medical monitoring.	2,4,11
AP1.10.1.4.5.	Critically review the feasibility of implementing the current patient decontamination doctrine of using supported units' manpower and report the results to the TRC and the ASD(HA).	2,3,9
AP1.10.1.4.6.	Procure and stockpile sufficient medical CMs to meet operational needs for NBC threats. Develop a process to monitor sustainment and/or replacement of medical CMs beyond initial acquisition.	2,4,11
AP1.10.1.4.7.	Resource the requirement to provide collective protective shelters for field medical facilities and report the results to the TRC.	2,4,5
AP1.10.1.4.8.	Develop new threat information for emerging radiological hazards and other toxicological hazards encountered in operations other than war.	7,10
AP1.10.1.4.9.	Develop a medical NBC defense awareness course for senior level DoD personnel.	3,9
AP1.10.2.4.1.	Update and formalize JTTPs for the medical management of NBC casualties to address the issues of operations, decontamination, treatment, tracking, and/or evacuation and/or quarantine of large numbers of personnel exposed to specific BW and/or CW agents or nuclear radiation hazards, to or through foreign territories.	3,6,7
AP1.10.2.4.2.	Integrate newly developed NBC medical defense TTPs into OPLANS and fixed facility Emergency Response Plans; exercise, wargame, and evaluate the effectiveness of those plans for NBC attack response.	3,6,7
AP1.10.2.4.3.	Develop treatment guidelines for medical management of radiation casualties and casualties resulting from a combination of radiation with conventional, biological, and/or chemical injuries.	3,6,7
AP1.10.2.4.4.	Review and develop procedures, as applicable, for transporting NBC contaminated casualties.	3,4,6
AP1.10.2.4.5.	Raise medical supply levels to support NBC casualty and/or prevention treatment, prepositioning as appropriate and upgrading the "push" supply system to allow for surge response.	4,11

Task Number	Task Description	Required Capability Links
AP1.10.2.4.6.	Develop adequate medical casualty modeling for the full spectrum of NBC threats to allow for medical treatment and evacuation planning. Integrate that modeling into appropriate OPLANS.	3,6,7
AP1.10.3.4.1.	Expand the scope of the automated patient information system to ensure standardized medical surveillance data collection. Include such elements as sources and magnitude of NBC exposure and medical treatments administered and reporting so that it can be more effectively used in a joint environment. That database should facilitate long-term medical follow-up.	7,10,11
AP1.10.3.4.2.	Develop a joint database of medical, environmental, and intelligence data that can be easily accessed by field users.	7,10,11
AP1.10.3.4.3.	Establish a tri-Service working group to coordinate, plan, develop, and implement capabilities for theater diagnostic laboratories for NBC agents.	2,4,5
AP1.10.3.4.4.	Ensure incorporation of NBC surveillance, detection, and identification aspects into joint exercises for the purpose of evaluating readiness capabilities.	2,4,9
AP1.10.3.4.5.	Develop a process to ensure coordinated medical input from the Services into the development and fielding of NBC detection devices.	2,11
AP1.10.3.4.6.	Develop field expedient method for accomplishing internal dosimetry for deployed forces operating in radiation environments.	2,4,5
AP1.10.3.4.7.	Deploy rugged, durable radiation monitors (e.g., semiconductor based) with alpha and low energy beta capability for PM and FHs.	2,4,5
AP1.10.3.4.8.	Develop a capability to determine qualitative and quantitative levels of exposure to CW agents.	2,4,5
AP1.10.4.4.1.	Develop an oversight process that measures medical NBC readiness training at MTF's and in active and Reserve component units. Oversight must include evaluation of common task training, especially NBC survival and NBC casualty management skills, and implement Service-specific training corrective measures.	1,3,9
AP1.10.4.4.2.	Insert NBC Defense training into unit level field medical training (e.g., Medical Red Flag) and exercises as referenced in Action Plan 34 and evaluate the effectiveness of the training.	3,4,9
AP1.10.4.4.3.	Establish joint NBC training requirements for medical personnel.	1,2,4
AP1.10.4.4.4.	Expand the MMCBC to meet the tri-Service deployment requirements.	1,2,4
AP1.10.4.4.5.	Modify the MENW course to incorporate MOOTW radiological hazards.	1,2,4
AP1.10.4.4.6.	Determine how directed energy threat, diagnosis, and treatment training should be disseminated to designated primary care providers.	1,2,4
AP1.10.4.4.7.	Develop tri-Service FMCBC and Field MENW courses intended for health-care support personnel to meet deployment requirements. Emphasis will be placed on casualty management prior to arrival to MTFs (e.g., decontamination, agent detection, equipment use, operation planning, NBC agent effects and characteristics, required PPE and/or MOPP, and radiation effects).	1,2,4
AP1.10.4.4.8.	Sustain NBC skills learned in the MMCBC and the MENW course with CD ROM, VTT, VTC, or other appropriate means.	2,4,7

Task Number	Task Description	Required Capability Links
AP1.10.4.4.9.	Code billets in deployable medical units (e.g., L-class ships, FH, CSH, ATH; etc.) both active and Reserve requiring MMCBC, MENW and/or directed energy certification using the following guidance: the MMCBC, the MENW, and/or the directed energy training shall be required for the selected primary care physicians (ER, GMO, pediatrics, family practice, and internal medicine), PAs, nurse practitioners, special forces medics, and independent duty corpsmen. MMCBC, MENW, and/or directed energy training certification for BSC, DC, VC, and RN billets shall be determined by the Services.	1,2,4
AP1.10.4.4.10.	Code billets in deployable medical units (e.g., L-class ships, FH, CSH, MASH, ATH; etc.) for health-care support personnel both active and Reserve requiring the FMCBC and FMENW courses (i.e., to track personnel readiness posture).	1,2,4
AP1.10.4.4.11.	Develop a tri-Service course for selected graduates (to be identified by the unit commanders) of MMCBC, MENW, FMENW or FMCBC courses to enable them to provide unit training and expertise for management of chemical and/or biological casualties (a train-the-trainer program).	1,2,4
AP1.10.4.4.12.	Review and revise the content of the MENW course with the goal of making it less technical and more relevant for primary care providers.	1,2,4
AP1.10.5.4.1.	Develop guidance for operations in a contaminated environment that will allow commanders to effectively function while accepting risks that are consistent with operational exposure guidance.	3,4,9
AP1.10.5.4.2.	Establish policy statement regarding the adequacy of operational radiation exposure guidance levels for women in operations other than war.	1,4
AP1.10.5.4.3.	Assess immediate and long-term health effects of exposure to DU (for men and women).	1,9,10
AP1.10.5.4.4.	Develop DU treatment protocols and policies for long-term health effects monitoring.	1,2,3
AP1.10.5.4.5.	Develop training programs for medical personnel on the treatment and risks associated with DU injuries.	1,2,3
AP1.10.5.4.6.	Procure and sustain DU equipment sets developed to execute immediate treatment protocols.	4,11
AP1.10.5.4.7.	Develop modified equipment sets to execute immediate treatment protocols for exposures to DU.	4,11
AP1.10.5.4.8.	Develop data required to make predictions of effects of sub-lethal ionizing radiation exposure alone and in combination with multiple insults (e.g., infectious agents and injuries).	1,4
AP1.10.5.4.9.	Incorporate data regarding the effects of sub-lethal ionizing radiation exposure alone and in combination with multiple insults (e.g., infectious agents and injuries) into casualty prediction models.	1,7
AP1.10.5.4.10.	Write a policy that provides field criteria for performing assessments of internal doses of radiation.	1,4
AP1.10.5.4.11.	Identify the force structure (personnel and equipment) required to implement the doctrine for internal radiation exposures during military operations (from peacekeeping to high-intensity combat) for military operations.	4,5

AP5.12. R&D

Task Number	Task Description	Required Capability Links
AP1.11.1.4.1.	Draft and obtain approval for a new charter for the ASBREM Committee authorizing the establishment of a biomedical needs integration subcommittee.	3,9
AP1.11.1.4.2.	Establish a standing subcommittee within the new ASBREM Committee empowered to collect, integrate, and prioritize biomedical R&D-related military operational needs for approval by ASBREM Committee. Membership should include the Services, the Chairman of the Joint Chiefs of Staff, and the ASD(HA).	3,9
AP1.11.1.4.3.	Publish a complete, prioritized list of biomedical R&D-related military operational needs by Feb 98 and update annually thereafter.	4,5,6
AP1.11.2.4.1.	Establish a tri-Service organization to manage all medical R&D efforts.	4,6,7
AP1.11.2.4.2.	Establish a mechanism to ensure the involvement of the functional sponsor throughout the R&D cycle (basic research through implementation of research results).	3,9,11
AP1.11.2.4.3.	Expedite fielding of IND products through well defined policies and procedures to include medical records and informed consent.	2,3,11
AP1.11.2.4.4.	The Service SGs provide to the TRC an annual "Medical Readiness critical acquisition billet report" which demonstrates compliance with the "Defense Acquisition Workforce Improvement Act" (10 U.S.C., reference (bb)) and justify or provide rationale for shortfalls or changes.	2,9
AP1.11.2.4.5.	Using the 733 Update Study, the Service SGs provide to the TRC an annual "Medical Readiness R&D Scientists" report that identifies what billets are filled and to justify or provide rationale for shortfalls or changes.	2,9
AP1.11.2.4.6.	Establish a mechanism to enhance training of the operational forces in use of new biomedical R&D products.	1,2,4
AP1.11.2.4.7.	Develop a Plan to ensure joint application of all R&D projects, when appropriate.	4,5,6
AP1.11.2.4.8.	Develop a system to incorporate information-based products (e.g., treatment protocols, physiological tables, medical surveillance data, and exposure limits; etc.) into the Services' and joint training and doctrine.	2,3,9
AP1.11.2.4.9.	Develop processes that ensure ongoing coordination among functional research areas.	4,5,6
AP1.11.2.4.10.	Develop a tri-Service Plan that promotes leveraging and cross-utilization of DoD and COTS assets.	4,5,6
AP1.11.2.4.11.	Develop common metrics for laboratory performance; e.g., overhead cost, scientific productivity, and managerial efficiency.	3,9
AP1.11.2.4.12.	Standardize the data architecture and information management systems among labs to enhance communication and coordination.	7
AP1.11.2.4.13.	Develop procedures that ensure R&D research managers know and utilize non-DoD research; e.g., civilian, Federal and international.	4,5,6
AP1.11.2.4.14.	Examine the development process for new military systems (e.g., weapons, lasers, sonar, and microwaves) to identify health issues related deployment of those systems and to determine if a biomedical R&D effort is required.	4,5,10

AP5.13. PM

Task Number	Task Description	Required Capability Links
AP1.12.1.4.1.	Establish a process to include PM input into the functional requirements, development, and testing stages of all new health information systems and the modification of existing systems.	7,10
AP1.12.1.4.2.	Program resources needed to conduct epidemiological data collection, analysis, and reporting.	10
AP1.12.1.4.3.	Define core data elements for health surveillance that should be standardized across Services and TRICARE MCS contract networks.	7,10
AP1.12.1.4.4.	Determine requirements for epidemiological data collection and analysis for development of a force health surveillance system for gathering, analyzing, and disseminating population-based health information during peacetime and contingencies.	3,7,10
AP1.12.1.4.5.	Incorporate all identified requirements into the development and integration of new or modified health and personnel information systems, to include the ambulatory data system, immunization tracking system, communicable disease reporting systems; etc., using DoD and MHS data standards and architecture.	3,7,10
AP1.12.1.4.6.	Assess and deploy existing software and, if necessary, develop software to support both aggregate and individual disease data collection, analysis, and reporting in the field.	7,10
AP1.12.1.4.7.	Establish a tri-Service data analysis and reporting center for assessing and reporting total force health status.	7,10
AP1.12.1.4.8.	Establish a tri-Service longitudinal database for all Service personnel that links with non-DoD databases and includes environmental and/or occupational exposure data, personnel data, intervention data (e.g., immunizations), and health outcome data.	3,7,10
AP1.12.1.4.9.	Identify and prioritize DoD health-related questions requiring epidemiological analysis.	10
AP1.12.1.4.10.	Develop a process for collection and analysis of joint deployment surveillance data from the Combatant Commands to forward to the Chairman of the Joint Chiefs of Staff for actions required to minimize preventable disease and injuries.	3,7,10
AP1.12.1.4.11.	Review and modify DNBI reporting categories to more accurately reflect disease incidence in deployed populations.	3,7,10
AP1.12.2.4.1.	Identify standardized methodologies, using nationally accepted models, for measuring prevention program feasibility and effectiveness.	10
AP1.12.2.4.2.	Identify appropriate measures of performance and effectiveness for evaluating total force pre-, during, and post-deployment prevention activities.	3,10
AP1.12.2.4.3.	Formally evaluate all proposed and existing prevention programs or interventions.	10
AP1.12.2.4.4.	Develop a prioritization plan describing use of scarce PM resources by the Services in support of the Combatant Commands.	10
AP1.12.3.4.1.	Review and update JOPES guidance to ensure appropriate medical intelligence is included in contingency planning and execution documents.	3,7,10
AP1.12.3.4.2.	Review and/or update and/or develop joint requirements for medical intelligence products to ensure that they meet consumer needs, addressing the full spectrum of anticipated contingencies and including all required information.	3,7,10
AP1.12.3.4.3.	Task the Combatant Commands and the Services to ensure that all pertinent overseas field medical information for validating ant/or updating medical intelligence databases is forwarded to the AFMIC in a timely manner.	3,7,10